Brownfields Phase II ESA Report
Pigeon Property
1705 Route 128
Westford, Vermont

DEC SMS#2019-4863, EPA RFA 19093

July 24, 2020

Prepared for:

Chittenden County Regional Planning Commission
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LEE #19-138

Contents

1.0 EXECUTIVE SUMMARY

LE Environmental LLC (LEE) conducted a Brownfields Phase II Environmental Site Assessment (ESA) at the Pigeon Property, located at 1705 Route 128, Westford, Chittenden County, Vermont (Site). The ESA was conducted pursuant to the approved Site-Specific Quality Assurance Project Plan Addendum (SSQAPP Addendum) dated February 25, 2020, approved March 6, 2020, and the American Society of Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (ASTM E 1903-11). This assessment was conducted for the Chittenden County Regional Planning Commission (CCRPC). This work is supported by the US Environmental Protection Agency (USEPA), the CCRPC, and the nineteen member municipalities in Chittenden County. CCRPC is funding this work via EPA Brownfields Assessment Grant #BF00A00483. The Site owner is the Pigeon Family Living Trust.

The Site includes a vacant residence and a former bus repair garage and gasoline filling station on approximately 3.3 acres of land. The buildings are currently unoccupied and are used for storage. The Site was developed prior to 1858, and historic Site use has include residential, a gasoline filling station, and automotive and bus repair. A small store was also once present on the southeastern portion of the property, and a tannery was noted on the adjoining property to the west in 1869.

The Site is located on the north side of Route 128. The area immediately surrounding the Site is the town center of Westford, with closely spaced residential homes, a municipal office building, a public library, and a town common. The DEC indicates that the Site is in a designated “urban background” zone for soil contamination. The topography of the Site is fairly flat on its south side, near Route 128, and then slopes downward to the north, toward the Browns River. There is also a ravine on the eastern side of the Site, which contains an outlet drainage pipe for the town common’s stormwater system. No odors or sheens were noted on the water exiting the outlet pipe. Portions of the northern and eastern ends of the property appear to have wetland vegetation.

Three structures are currently present on the property. The residence is a two-story, wood framed structure with a full basement. The garage is a single-story, wood framed structure, with a slab on-grade foundation. The third building is a small wood framed shed.

LEE prepared a Phase I Environmental Site Assessment (ESA) report for the property in September 2019, and three Recognized Environmental Conditions (RECs) were identified during the Phase I ESA:

1. Historic use of the property for bus/automotive repair and as a gasoline filling station.

2. Possible presence of an abandoned underground storage tank (UST).
3. Historic adjoining property use as a tannery.

A Phase II ESA was recommended to determine whether contamination is present on the Site due to the identified RECs.

This Phase II ESA included removal of the abandoned gasoline UST, soil boring advancement, groundwater monitoring well installation, soil sampling, groundwater sampling, and drinking water sampling. Soils are the Site consist of sand with varying amounts of silty overlaying dense, native clay. The clay contained distinct sand layers in each boring.

An abandoned, 1,100-gallon, gasoline UST at the Site was removed from the Site on June 2, 2020. The UST was a relic of the former gasoline filling station that operated on the Site from circa 1940 through the mid 1980s. The age of the UST and piping is not known, but it appeared to be at least 80 years old. The UST was a single-walled tank, and piping from other former USTs was also encountered in the excavation. The piping for the removed UST appeared to have been cut near the former pump island, and had paper stuffed in the end. It was buried approximately 1.5' to 2' below grade, and was found to be in failed condition upon removal, with extensive rust, pitting, and several large holes in the bottom of the UST. Groundwater was encountered at 6' below grade in the excavation, and a sheen was noted on the groundwater.

The photoionization detector PID readings ranged from 17.1 parts per million (ppm) in soil under the former dispenser island to 2,374 ppm at the top of the tank where piping (not attached to this tank) was found. PID readings ranging from 1,286 ppm to 1644 ppm were observed under the UST, which was also where groundwater was encountered.

A pipe with unknown purpose was noted on the southern wall of the UST excavation. The excavation could not be extended in this direction due to the presence of Route 128 and special permitting, traffic control and engineering would be required to dig in this area.

The depth to water ranged from 4.45' below grade in the southern portion of the Site to 11.59' below grade in the northern portion of the Site. The overall groundwater flow beneath the Site appears to be northerly. The approximate hydraulic gradient is approximately 10% on the southern portion of the Site and 16% in the central and northern portions of the Site.

Groundwater is impacted with petroleum related Volatile Organic Compounds (VOCs) at concentrations above the Vermont Groundwater Enforcement Standards (VGES) and above the vapor intrusion standards for groundwater in the vicinity of the former UST, and the plume extends northerly at least 200 feet. The limits of the

dissolved-phase contaminant plume were not defined by this investigation. The overall low permeability of the native soils implies the migration of the contaminant plume will be limited. The low permeability of the soils was evident during sampling, where very low recharge was noted in the groundwater monitoring wells.

Shallow and deep soils are impacted with petroleum contamination in the southern portion of the property, near the former UST location, and in the parking area to the east. Shallow soils are impacted with Polycyclic Aromatic Hydrocarbons (PAHs) in the area to the north of the garage. The limits of the contamination were not defined by this investigation.

No VOCs were reported in the drinking water sample obtained during this Phase II ESA.

LEE has developed the following recommendations during this Phase II ESA.

Additional delineation of soil and groundwater contamination should be completed. Additional groundwater sampling of the existing groundwater monitoring wells should be performed prior to delineation. A soil vapor investigation should be performed to ensure the contamination detected is not impacting the indoor air quality in the residence and garage. In addition, soil vapor should be investigated in areas slated for redevelopment. A suspect pipe near Route 128 should be investigated via a geophysical investigation in the roadway.

Once delineation is completed, an evaluation of corrective action alternatives (ECAA) and a corrective action plan (CAP) could be prepared per the requirements of Subchapter 6 of the DEC's I-Rule.

2.0 SITE INFORMATION

LE Environmental LLC (LEE) conducted a Brownfields Phase II Environmental Site Assessment (ESA) at the Pigeon Property, located at 1705 Route 128, Westford, Chittenden County, Vermont (Site). The ESA was conducted pursuant to the approved Site-Specific Quality Assurance Project Plan Addendum (SSQAPP Addendum) dated February 25, 2020, approved March 6, 2020, and the American Society of Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (ASTM E 1903-11). This assessment was conducted for the Chittenden County Regional Planning Commission (CCRPC). This work is supported by the US Environmental Protection Agency (USEPA), the CCRPC, and the nineteen member municipalities in Chittenden County. CCRPC is funding this work via EPA Brownfields Assessment Grant #BF00A00483. The Site owner is the Pigeon Family Living Trust.

Site Information Table	
Site Owner Name:	Pigeon Family Living Trust – George Pigeon
Site Owner Address	1705 Route 128, Westford, VT 05494
Site Owner E-mail	gepigeon@msn.com
Site Owner Phone	(802) 355-6628

3.0 CURRENT USE OF THE SITE

The Site includes a vacant residence and a former bus garage on approximately 3.3 acres of land. The buildings are currently unoccupied and are used for storage.

4.0 CURRENT ADJOINING PROPERTY USES

Current uses of the adjoining properties are as follows:

- North: Residential
- South: Town Common
- East: Multi-family residential
- West: Municipal Offices

5.0 SITE DESCRIPTION

The Site is located on the north side of Route 128. The area immediately surrounding the Site is the town center of Westford, with closely spaced residential homes, a municipal office building, a public library, and a town common. The DEC indicates that the Site is in a designated "urban background" zone for soil contamination. The topography of the Site is fairly flat on its south side, near Route 128, and then slopes downward to the north, toward the Browns River. There is also a ravine on the eastern side of the Site, which contains an outlet drainage pipe for the town common's stormwater system. No odors or sheens were noted on the water exiting the outlet pipe. Portions of the northern and eastern ends of the property appear to have wetland vegetation.

Three structures are currently present on the property. The residence is a two-story, wood framed structure with a full basement. The garage is a single-story, wood framed structure, with a slab on-grade foundation. The third building is a small wood framed shed.

6.0 LATITUDE/LONGITUDE

The Site coordinates are The Site coordinates are 44° 36' 45.78'' north latitude and 73° 0' 34.99'' west longitude.

7.0 PROPERTY HISTORY

The Site was developed prior to 1858. Historic Site use has included residential, with a gasoline filling station, and automotive and bus repair. A small store was also once present on the southeastern portion of the property. A building was noted on or near the northeastern property line on historic (1869 and 1915) maps. The building was gone by 1948. A tannery was noted on the adjoining property to the west in 1869.

A geophysical investigation performed at the Site revealed the possible presence of an underground storage tank (UST) near Route 128, and several smaller buried metal objects.

LEE prepared a Phase I ESA report for the property in September 2019, and three Recognized Environmental Conditions (RECs) were identified during the Phase I ESA:

1. Historic use of the property for bus/automotive repair and as a gasoline filling station.
2. Possible presence of an abandoned UST.
3. Historic adjoining property use as a tannery.

A Phase II ESA was recommended to determine whether contamination is present on the Site due to the identified RECs.

8.0 SITE CONTAMINANT BACKGROUND

A. Release Date and Description

Evidence of releases of hazardous substances and petroleum products at the Site was observed during this Phase II ESA. Exceedances of regulatory residential soil standards are noted below:

1. Elevated PID readings, stained soils, and strong petroleum odors were noted in the gasoline UST excavation, including at shallow depths near the surface. Additionally, soils beneath the former UST had concentrations of Benzene, Ethylbenzene, Xylenes, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, and Naphthalene above residential regulatory standards. The fuel ID sample collected from underneath the UST indicated the presence of leaded gasoline.
2. Shallow and deep soils in the former dispenser area also had elevated PID readings, staining, and strong petroleum odors. Concentrations of Benzene and Naphthalene exceeded residential regulatory standards in the deep soils, and the Benzo(a)pyrene concentration exceeded residential regulatory standards in the shallow soils.

3. Soils in the parking area on the southeastern portion of the Site, exhibited elevated PID readings, stained soils, and weathered petroleum odors. The Benzo(a)pyrene concentration in the deep soil sample collected from this area exceeded residential regulatory standards in the shallow soils.
4. Soils in soil boring SB-5 exhibited elevated PID readings and petroleum odors at the groundwater interface. However, the contaminant concentrations reported from the soil sample did not exceed residential regulatory standards.
5. Shallow soil samples obtained from SB-6 and SB-7, which were located north of the garage, where machinery was stored in the past, had concentrations of Polycyclic aromatic hydrocarbons (PAHs) above residential regulatory standards, and the toxicity equivalency quotient (TEQ) values exceeded DEC's Statewide Urban Background concentration.
6. Groundwater in the former UST location had concentrations of MtBE, Benzene, Toluene, Ethylbenzene, Xylenes, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, Naphthalene, Arsenic, and Lead in exceedance of the Vermont Groundwater Enforcement Standards (VGES).
7. Downgradient monitoring well MW-2 and MW-5 had concentrations of Benzene and Naphthalene in exceedance of the VGES, and concentrations of Ethylbenzene were also reported above the VGES at MW-2.

B. Release Report Date

The petroleum release from the gasoline UST was reported via a phone call to the spill number and the Sites Management Section at the DEC on June 2, 2020. All additional contaminant exceedances are being reported via submittal of this document to the DEC.

C. Release Response Actions

No release response actions have been completed for the reported releases.

D. Previous Environmental Documents

The following previous environmental documents exist for this Site and are on file with the DEC:

- Phase I Environmental Site Assessment Report dated September 23, 2019.
- Site-Specific Quality Assurance Project Plan Addendum dated February 25, 2020.
- UST Removal, Pigeon Property, 1705 Route 128, Westford, Vermont, June 25, 2020.

E. Copy of Previous Environmental Documents

The referenced Phase I ESA report, SSQAPP Addendum, and Tank Removal report are on-file with the DEC in Montpelier, Vermont.

F. List of Governmental Records Reviewed

LEE reviewed various governmental records during and preceding this Phase II ESA, including records reviewed during the Phase I ESA:

- Town of Westford Land Records
- State of Vermont Department of Environmental Conservation Hazardous Sites List, Solid Waste Facilities list, Leaking UST and Above-ground Storage Tank database, Brownfields List
- EPA National Priorities List (NPL), Proposed NPL, Delisted NPL, CERCLIS, RCRA CORRACTS, RCRA TSDF, RCRA Generators database, Institutional Controls inventory, Emergency Response Notification System

9.0 UPDATED CONCEPTUAL SITE MODEL

A. Updated Site Conceptual Model

The area immediately surrounding the Site is the town center of Westford, with closely spaced residential homes, a municipal office building, a public library, and a town common. The topography of the Site is fairly flat on its south side, near Route 128, and then slopes downward to the north, toward the Browns River. There is also a ravine on the eastern side of the Site, which contains an outlet drainage pipe for the town common's stormwater system. No odors or sheens have been noted on the water exiting the outlet pipe.

The Site was developed as of the earliest record located thus far (1858). The property use has included residential with a gasoline filling station and automotive and bus repair. According to the current owner, the gasoline tanks were no longer used after circa 1985. A small store was also once present on the southeastern portion of the Site. A tannery was present on the adjoining property to the west on an 1869 map. It is unknown how long the tannery operated.

The on-Site residence is heated with fuel oil. The garage is not currently heated but appears to have been heated with wood, propane, and/or fuel oil historically. The buildings are served by a private dug supply well and at least one septic system. The configuration and location of the septic system is not known.

Bedrock was not encountered in this Phase II ESA. According to the most recent geologic map of Vermont, the bedrock in the vicinity of the Site consists of Cambrian

and Neoproterozoic aged schist in the Pinnacle formation and the overburden deposits in the area of the Site are mapped as boulders in clay.[1]

The Site is approximately 470 feet above current sea level on the southern portion of the Site, and drops to approximately 435 feet above current sea level at the northern terminus of the parcel boundary. This area has undergone extensive deposition and erosional processes through recent glacial events. The retreat of the Laurentide Ice Sheet led to the formation of glacial Lake Vermont approximately 13,500 years ago. The elevation of the lake surface was approximately 620 feet above sea level, significantly higher than the elevation of the current Lake Champlain. Streams flowing off the melted glacier deposited many sediments, with larger sediments deposited near the front of the glacier and finer grained sediments deposited away from the front of the glacier. Clay and silt varves were deposited in the calmer portions of Lake Vermont.[2]

The data obtained during soil borings indicate the soils at the Site consist of sand with varying amounts of silty overlaying dense, native clay. The clay contained distinct sand layers in each boring, and distinct varves were noted at SB-7. This data suggests the Site was likely located in a calmer portion of Lake Vermont. Sand layers noted in the clay point to periods of higher energy deposition in the lake.

The depth to water ranged from 4.45' below grade at MW-1 to 11.59' below grade at MW-3. The overall groundwater flow beneath the Site appears to be to the north. The approximate hydraulic gradient is approximately 10% on the southern portion of the Site and 16% in the central and northern portions of the Site. The sand layers noted above are likely the mechanism for the migration of the dissolved phase contamination through the Site. The overall low permeability of the native soils implies the migration of the contaminant plume will be limited. The low permeability of the soils was evident during sampling, where very low recharge was noted in the groundwater monitoring wells.

Shallow and deep soils are impacted with petroleum contamination in the southern portion of the property, near the former UST location, and in the parking area to the east. Shallow soils are impacted with PAHs in the area to the north of the garage. The limits of the contamination were not defined by this investigation.

Groundwater is impacted with petroleum related VOCs at concentrations above the VGES and the vapor intrusion standards for groundwater in the vicinity of the former UST, and the plume extends northerly at least 200 feet. The limits of the dissolved-phase contaminant plume were not defined by this investigation.

[1] ANR Atlas.
[2] S.F. Wright

B. Potential Contamination Sources

The most apparent source(s) of contamination at the Site include the leaking gasoline UST removed in June 2020, historic USTs, and historic use and storage of hazardous substances and petroleum products.

C. Potential Receptors

Potential receptors of contamination include Site users. Shallow soils are impacted with petroleum and PAHs at the Site. The limits of the dissolved-phase petroleum contamination plume has not been fully defined by this assessment, nor have the limits of the shallow soil PAH contamination. The groundwater plume is not likely to migrate off-Site due to the low permeability soils on the Site. The Site is currently vacant and not used.

D. Utility Corridors

No buried underground utilities are known to exist on or in the immediate vicinity of the Site, except the water line from the well to the residence and garage, and the septic systems for the buildings.

E. Water Bodies and Wetlands

The Browns River abuts the property on its north side, and is approximately 450' from the former UST location. There is also an unnamed tributary that runs along the western portion of the property, and this tributary is approximately 200 feet northwest of the former UST location. The ANR Natural Resources Atlas does not depict Vermont State Wetland Inventory (VSWI) or wetlands advisory areas on the Site. However, apparent wetland vegetation was noted on portions of the Site. Based on the results of the investigation, surface water does not appear to be at risk. However, the groundwater plume should continue to be monitored to ensure it does not impact the waterways in the future.

F. Water Supplies

The Site and nearby properties are served by private wells. Approximately 28 water supply wells are depicted on the ANR Natural Resources Atlas within a quarter-mile of the Site. The on-Site supply well was sampled and tested for VOCs and no exceedances of regulatory standards were noted. The data suggests off-Site supply wells are unlikely to be impacted from contamination at this Site. However, the groundwater plume should continue to be monitored to ensure it does not impact the nearby water supplies in the future.

G. Site Users

The Site is currently unoccupied and not being used except for storage by the owners of the property. Portions of the area have shallow soil contamination and future Site users could come into contact with this soil. A soil gas sampling investigation should be conducted to determine if the residence and/or garage have elevated levels of VOCs in indoor air.

10.0 WORK PLAN DEVIATIONS

All of the work described in the approved SSQAPP Addendum dated February 25, 2020 was performed as described with the following deviations:

- A soil sample was not collected from soil boring SB-3, because the soil boring was installed in the same location at the former gasoline UST, and a soil sample and duplicate were obtained from this location during the UST removal.
- Additional soil samples were obtained from soil boring SB-2 and SB-4, because contamination was noted both at the surface and at deeper depths.
- The soil sample collected from SB-5 could not be obtained from the zone with the highest PID reading due to poor sample recovery. The laboratory sample was instead collected from next sampling run.
- A PCB sample was obtained from soil boring SB-1 in order to get a background PCB level in the event that PCBs were found around the garage.
- The lack of recharge in the groundwater monitoring wells prohibited the collection of metals samples at MW-3 and MW-5.

11.0 SAMPLE COLLECTION DOCUMENTATION

The following tables outline the location of samples, the method of collection, and the well or soil boring identification number.

Soil Samples

Sample ID	Depth (ft bg)	Analytical Methods	Collection Method
UST-1/Duplicate	6	VOCs via 8260C PAHs via 8270D RCRA 8 Metals via 6020 TPH Fuel ID via 8100	Grab from Test Pit
SB-1	0-1.5	VOCs via 8260C PAHs via 8270D RCRA 8 Metals via 6020 PCBs via 8082	Grab from Sample Sleeve
SB-2S	0-1.5	VOCs via 8260C PAHs via 8270D RCRA 8 Metals via 6020 PCBs via 8082	Grab from Sample Sleeve

Soil Samples Continued…

SB-2D	13-15	VOCs via 8260C PAHs via 8270D RCRA 8 Metals via 6020	Grab from Sample Sleeve
SB-4S	0-1.5	VOCs via 8260C PAHs via 8270D RCRA 8 Metals via 6020 PCBs via 8082	Grab from Sample Sleeve
SB-4D	9-11	VOCs via 8260C PAHs via 8270D RCRA 8 Metals via 6020 PCBs via 8082	Grab from Sample Sleeve
SB-5/Duplicate	9-10	VOCs via 8260C PAHs via 8270D RCRA 8 Metals via 6020 PCBs via 8082	Grab from Sample Sleeve
SB-6	0-1.5	VOCs via 8260C PAHs via 8270D RCRA 8 Metals via 6020 PCBs via 8082	Grab from Sample Sleeve
SB-7	0-1.5	VOCs via 8260C PAHs via 8270D RCRA 8 Metals via 6020 PCBs via 8082	Grab from Sample Sleeve

Groundwater Samples

Sample ID	Analytical Methods	Collection Method
MW-1/Duplicate	VOCs via 8260C RCRA 8 Metals via 6020	Grab via Low Flow Sampling
MW-2	VOCs via 8260C RCRA 8 Metals via 6020	Grab via Low Flow Sampling
MW-3	VOCs via 8260C	Grab via Low Flow Sampling
MW-4	VOCs via 8260C RCRA 8 Metals via 6020	Grab via Low Flow Sampling
MW-5	VOCs via 8260C	Grab via Low Flow Sampling

Drinking Water Sample

Sample ID	Analytical Methods	Collection Method
DWS-1	VOCs via 524.2	Grab from Pressure Tank

12.0 CONTAMINATED MEDIA CHARACTERIZATION

LEE performed a supplemental Phase II ESA consisting of a soil, groundwater and drinking water evaluation. The goal of this work was to determine whether the past use and storage of hazardous substances and petroleum products on the property have impacted soils, groundwater and/or drinking water. The future plans for development of the Site include possible construction of new municipal offices, and/or commercial and residential development. Therefore, all laboratory analytical data have been evaluated in the context of state and federal residential thresholds

for contaminated media. Photos showing the investigation locations are in Appendix C.

A. Gasoline UST Removal

On June 2, 2020, LEE conducted an environmental assessment of an abandoned, 1,100-gallon, gasoline UST at the Site. The UST was a relic of the former gasoline filling station that operated on the Site from circa 1940 through the mid 1980s. LEE arranged for and oversaw the UST removal and sampling. US Ecology of Williston, Vermont performed the excavation, UST cleaning and removal, backfilling, and waste disposal.

The age of the UST and piping is not known, but it appeared to be at least 80 years old. The owner was not aware there were any USTs left in the ground, and he remembered tanks being removed from the Site sometime in the 1980s or 1990s. The UST was a single-walled tank, and piping from other former USTs was also encountered in the excavation. The piping for the removed UST appeared to have been cut near the former pump island, and had paper stuffed in the end. It was buried approximately 1.5' to 2' below grade, and was found to be in failed condition upon removal, with extensive rust, pitting, and several large holes in the bottom of the UST. The UST was cleaned in place. Approximately 330 gallons of gasoline and water was pumped from the UST, and one 55-gallon drums of sludge was recovered during the cleaning. The UST bottom was at 6' below grade. The excavation measured 20' wide, 10' long and 6' deep upon completion. Groundwater was encountered at 6' below grade, and a sheen was noted on the groundwater.

Eleven soil samples were collected for field screening of volatile vapors using a calibrated Mini-RAE Lite photoionization detector equipped with a 10.6 eV bulb (PID). Soils consisted of sand and silt fill overlaying native clay. The PID readings ranged from 17.1 parts per million (ppm) in soil under the former dispenser island to 2,374 ppm at the top of the tank where piping (not attached to this tank) was found. PID readings ranging from 1,286 ppm to 1644 ppm were observed under the UST, which was also where groundwater was encountered. The following table outlines the PID readings obtained during the investigation. Sample locations are shown on the UST Removal Report in Appendix G.

UST Removal Soil Screening Samples

Sample ID	Location	Depth	PID Reading
SS-1	Top of Tank	0.5 feet	705.4 ppm
SS-2	Top of Tank	1.5 feet	61.0 ppm
SS-3	Under Dispenser	1.5 feet	17.1 ppm
SS-4	Side of Tank	2.5 feet	926.2 ppm
SS-5	Top of Tank	1.5 feet	2,374 ppm
SS-6	Side of Tank	1.5 feet	212.4 ppm
SS-7	Side of Tank	2.5 feet	755.8 ppm
SS-8	Side of Tank	2.5 feet	1,440 ppm
SS-9*	Bottom of Tank	6 feet	1,644 ppm
SS-10	Bottom of Tank	6 feet	1,624 ppm
SS-11	Bottom of Tank	6 feet	1,286 ppm

The soil sample with an asterisk (known as UST-1) was submitted to Eastern Analytical Inc. of Concord, NH for analysis of VOCs, PAHs, RCRA 8 metals, and TPH 8100 Fuel ID.

A pipe with unknown purpose was noted on the southern wall of the UST excavation. The excavation could not be extended in this direction due to the presence of Route 128 and special permitting, traffic control and engineering would be required to dig in this area.

B. Soil

Prior to the initiation of subsurface activities, LEE pre-marked the proposed boring locations and Dig Safe ticket number 20202304559 was obtained. A Site-Specific Health and Safety Plan was prepared and reviewed by field staff prior to work. The locations of the soil borings are noted on the Site Map.

On June 5, 2020, LEE oversaw advancement of seven soil borings at the locations shown on the attached maps. T&K Drilling of Troy, NH advanced soil borings SB-1 through SB-7 using a Geoprobe with a 2.25" x 3' stainless steel sampler. Continuous soil sampling was conducted during soil boring advancement. Soil samples were screened for VOCs using a calibrated PID.

The geoprobe soil borings were driven to depths ranging from 12' bg at SB-1 to 15' bg at SB-2 through SB-7. Soils at the Site consist of sand with varying amounts of silty overlaying native clay. The clay contained distinct sand layers in each boring, and varves were noted at SB-7.

Soil samples were collected from each boring at the zone with the highest PID reading or from 0-1.5 below grade if elevated PID readings were not noted. Exceptions to this include: no sample was obtained from SB-3 since UST-1 and a

duplicate were obtained from this location during the UST removal. Shallow and deep samples were obtained from SB-2 and SB-4 due to contamination being detected in shallow and deep horizons in those locations. A soil sample could not be obtained from the zone with the highest PID reading at SB-5 due to poor sample recovery, so the sample was collected beneath this zone, which had the second highest PID reading.

Laboratory analysis included the following constituents at SB-1, SB-2S, SB-2D, SB-4S, SB-4D, SB-5, SB-6, and SB-7:

- VOCs via EPA Method 8260c
- PAHs via EPA Method 8270d
- RCRA 8 Metals via EPA Method 6020

Laboratory analysis included the following constituents at SB-1, SB-2S, SB-4S, SB-4D, SB-5, SB-6, and SB-7:

- Polychlorinated biphenyl compounds (PCBs) via EPA Method 8082

A duplicate soil sample was obtained from SB-5. Samples were submitted to EAI for analysis.

C. Groundwater

Groundwater monitoring wells were installed at five soil boring locations. The wells ranged in depth from 12' below grade at MW-5 to 15' below grade at MW-1 through MW-4. Each well consists of a 1" PVC monitoring well with a 10' length of 1" slotted screen spanning the water table. The wells are flush mounted with steel road box covers. Each well was developed following its installation with a peristaltic pump. The locations of the monitoring wells were measured/surveyed and incorporated into the attached Site maps. Soil boring and groundwater monitoring well construction logs are included in Appendix B.

On June 17, 2020, LEE collected groundwater samples using low-flow sampling techniques. Prior to groundwater sample collection, depth to water was measured with a water level indicator from the top of casing reference points. These data were used to calculate the water level elevations, and to determine the groundwater flow direction and horizontal gradient beneath the Site.

The depth to water ranged from 4.45' below grade at MW-1 to 11.59' below grade at MW-3. The overall groundwater flow beneath the Site appears to be to the north. The approximate hydraulic gradient is approximately 10% on the southern portion of the Site and 16% in the central and northern portions of the Site.

Groundwater samples were collected from the monitoring wells using a peristaltic pump and low flow sampling methods. Purging took place at approximately 200 milliliters per minute. Each well was purged dry fairly quickly, and sampling occurred following recharge. The recharge was very slow in monitoring wells MW-2, MW-3, MW-4, and MW-5. The groundwater samples were collected directly from the pump discharge tubing into laboratory-supplied pre-acidified sample containers.

Groundwater samples were analyzed for VOCs via EPA Method 8260c and RCRA 8 metals via EPA Method 6020. A duplicate sample was tested for VOCs and metals and a trip blank was analyzed for VOCs. Samples were submitted to EAI for analysis. There was insufficient water in monitoring well MW-3 and MW-5 to allow for collection of a sample for metals analysis.

D. Supply Well Sampling

LEE collected a water sample from the on-Site shallow water supply well on June 17, 2020. The sample was collected from the pressure tank in the basement. The sample was submitted to EAI for analysis of VOCs via EPA Method 524.2.

E. Other Media

No surface water, sediment, soil gas or indoor air testing was performed during this Phase II ESA.

F. Site-Specific Values

No site-specific values were proposed or generated during this Phase II ESA.

13.0 SITE-SPECIFIC RISK ASSESSMENT

No site-specific risk assessment was proposed or generated during this Phase II ESA.

14.0 MAPS

A Site location map, Site Map, Soil VOC Contaminant Map, Soil B(a)P TEQ Contaminant Map Groundwater Contour Map, Groundwater Contaminant Concentration Map, a Groundwater Contaminant Distribution Map for Naphthalene, and a current ANR Natural Resources Atlas map are attached.

15.0 DISCUSSION

A. Soil Sample Results

Soil analytical results were tabularized and compared with the soil standards contained in the 2019 I-Rule. A tabular presentation of the data is included in Appendix E. Following is a discussion of the soil sample results obtained during this Phase II ESA.

VOCs

Petroleum related VOCs are present in shallow and deep soils in the vicinity of the former gasoline UST (UST-1) and dispenser area (SB-2). Elevated PID readings, stained soils, and strong petroleum odors were noted in the gasoline UST excavation, including at shallow depths near the surface. Additionally, soils beneath the former UST had concentrations of Benzene, Ethylbenzene, Xylenes, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, and Naphthalene above residential regulatory standards. The fuel ID sample collected from underneath the UST was reportedly leaded gasoline.

Shallow and deep soils in the former dispenser area also had elevated PID readings, staining, and strong petroleum odors. Concentrations of Benzene and Naphthalene, exceeded residential regulatory standards in the deep soil sample. Several other petroleum related VOCs, including MtBE were reported at concentrations below the residential regulatory standards at this location.

Soils in soil borings SB-4 and SB-5 exhibited elevated PID readings and petroleum odors at the groundwater interface. However, the contaminant concentrations reported from the soil samples did not exceed residential regulatory standards.

PAHs

Benzo(a)pyrene concentrations exceeded residential regulatory standards in the deep soil samples collected from the dispenser area (SB-2) and the parking lot area (SB-4).

Shallow soil samples obtained from SB-6 and SB-7, which were located north of the garage, where machinery was stored in the past, had concentrations of several individual PAHs above residential regulatory standards, and the toxicity equivalency quotient (TEQ) values exceeded DEC's Statewide Urban Background concentration.

Metals

Concentrations of metals were reported in all of the soil samples collected. None of the metals concentrations exceeded residential regulatory standards.

PCBs

No PCBs were reported above laboratory detection limits in any of soil samples collected.

Method 2 Cumulative Risk Assessment

Method 2 Cumulative Risk Assessments (CRA) were performed for all shallow soil data without indicated exceedances of current residential soil standards, which included SB-1 and SB-4S. The results of the Method 2 CRA indicate an elevated carcinogenic or non-carcinogenic risk at the SB-4S location. Method 2 CRA tabulations are included in Appendix E.

B. Groundwater Sample Results

The groundwater testing results were tabulated in comparison to the current VGES and I-Rule non-residential vapor intrusion standards. A tabular presentation of the data is included in Appendix E. Following is a discussion of the groundwater sample results obtained during this Phase II ESA.

Groundwater in the former UST location had concentrations of MtBE, Benzene, Toluene, Ethylbenzene, Xylenes, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, Naphthalene, Arsenic, and Lead in exceedance of the VGES.

Downgradient monitoring well MW-2 and MW-5 had concentrations of Benzene in exceedance of the residential vapor intrusion standard for groundwater, and concentrations of Naphthalene in exceedance of the VGES. Concentrations of Ethylbenzene were also reported above the residential vapor intrusion standard for groundwater at MW-2. The laboratory noted the VOC concentrations reported in MW-5 may be due to carryover from the duplicate sample. Due to the low well recharge additional vials could not be submitted for confirmation. However, based on the apparent groundwater flow direction and the magnitude of the petroleum release, the concentrations may present current aquifer conditions.

A map showing the dissolved-phase petroleum VOC contaminant concentrations, and a contaminant distribution map of the naphthalene plume is attached to this report. The data indicate the highest concentrations are located in the former UST area, and they decrease to the north. Benzene and naphthalene were detected in the furthest downgradient monitoring well (MW-5), which is approximately 200 feet northwest of the former UST location. The extent of the contamination was not delineated during this Phase II ESA.

C. Drinking Water Sample Results

The water supply data collected during this Phase II ESA indicate that no VOCs were reported in the water supply sample.

16.0 DATA PRESENTATION

LEE compiled current and previous analytical data for the Site in tabular format with comparisons to the current state and federal soil screening values presented in the I-Rule. These tables and the supporting laboratory data in Appendix E. Observations regarding the data and comparison to current screening values are presented in Section 12.

17.0 QA/QC SAMPLE RESULTS

LEE's quality assurance officer performed data validation on all field and laboratory data generated during the Phase II ESA, according to LEE's current generic QAPP (RFA 19093) and the approved SSQAPP Addendum dated February 25, 2020. The results are included in Appendix F and they indicate the field and laboratory data should be accepted without qualification with the exception of the VOC analysis at MW-5. The laboratory noted there may be some carryover from the duplicate sample in the MW-5 sample.

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18.0 INVESTIGATION DERIVED WASTE

Investigation-derived waste associated with this investigation included small amounts of soils generated during soil borings, and small volumes of purge water from the monitoring wells. All of the soils and groundwater generated were returned to the Site. No investigation-derived waste was left on-Site pending testing or disposal.

19.0 CONCLUSIONS AND RECOMMENDATIONS

LEE performed a Phase II ESA consisting of a soil, groundwater, and drinking water evaluation. LEE has developed the following conclusions during the supplemental Phase II ESA.

- A 1,100 gallon gasoline UST was removed from the Site on June 2, 2020. The UST was a single-walled tank, and piping from other former USTs was also encountered in the excavation. The piping for the removed UST appeared to have been cut near the former pump island, and had paper stuffed in the end. It was buried approximately 1.5' to 2' below grade, and was found to be in failed condition upon removal, with extensive rust, pitting, and several large

holes in the bottom of the UST. A soil sample (UST-1) and duplicate were obtained from beneath the UST. The fuel ID sample results indicate the primary contamination signature under the tank is leaded gasoline.

- Seven soil borings were advanced at the Site on June 5, 2020. Eight soil samples and a duplicate were obtained during drilling, and five groundwater monitoring wells were installed.
- The soil data collected during this Phase II ESA indicate releases of petroleum and hazardous substances has taken place at the property. Shallow and deep petroleum contamination is located in the vicinity of the removed UST, the former dispenser, and the parking lot.
- Elevated PAHs are present in shallow soils in the area north of the garage. The vertical and horizontal extent of this contamination was not determined during this investigation.
- The Method 2 CRA analysis indicates an elevated carcinogenic or non-carcinogenic risk at the SB-4S location.
- No PCBs were reported above laboratory detection limits in the soil samples obtained.
- Concentrations of metals reported in the soil samples were below residential regulatory standards.
- The depth to water ranged from 4.45' to 11.59' across the Site. The overall groundwater flow beneath the Site appears to be northerly. The approximate hydraulic gradient is approximately 10% on the southern portion of the Site and 16% in the central and northern portions of the Site.
- The groundwater data indicate a petroleum contaminant plume is present on the Site. The highest concentrations are located in the former UST area, and they decrease to the north. Benzene and naphthalene were detected in the furthest downgradient monitoring well, which is approximately 200 feet northwest of the former UST location. The extent of the contamination was not delineated during this Phase II ESA.
- Concentrations of arsenic and lead above the VGES were reported in the groundwater in the former UST location.

LEE has developed the following recommendations during this Phase II ESA.

Additional delineation of soil and groundwater contamination should be completed. Additional groundwater sampling of the existing groundwater monitoring wells should be performed prior to delineation. A soil vapor investigation should be performed to ensure the contamination detected is not impacting the indoor air quality in the residence and garage. In addition, soil vapor should be investigated in areas slated for redevelopment. The suspect pipe near Route 128 should be investigated via a geophysical investigation in the roadway.

Once delineation is completed, an evaluation of corrective action alternatives (ECAA) and a corrective action plan (CAP) could be prepared per the requirements of Subchapter 6 of the DEC's I-Rule.

20.0 SIGNATURE AND CERTIFICATION

"I certify under penalty of perjury that I am an environmental professional and that all content contained within this deliverable is to the best of my knowledge true and correct."

_____

Angela Emerson, PG, Environmental Professional

21.0 MAPS AND APPENDICES

MAPS

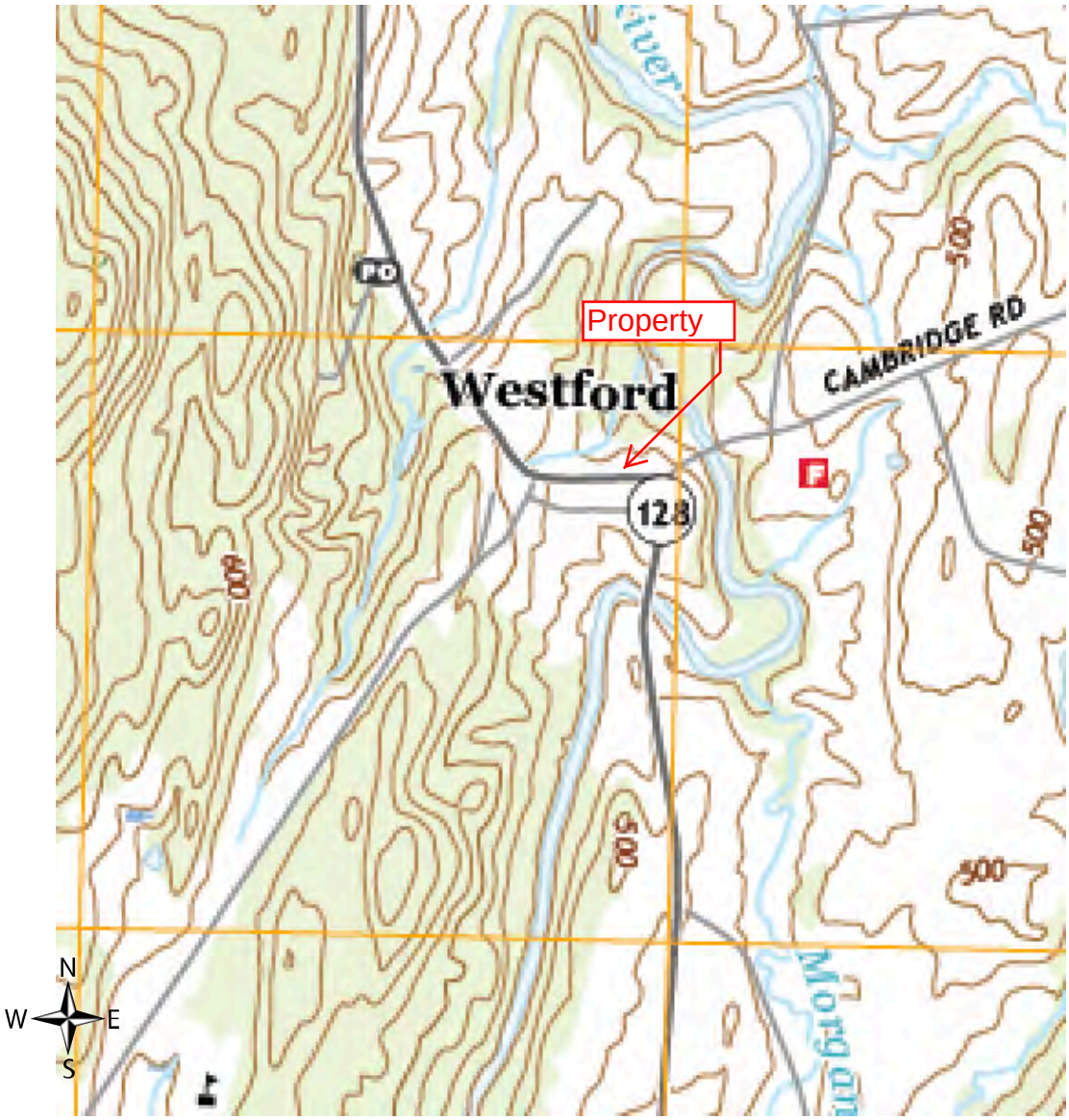
Site Location Map
Site Map
ANR Atlas Map
Soil Contaminant Map - B(a)P TEQ
Soil Contaminant Map - VOCs
Groundwater Contour Map
Groundwater Contaminant Concentration Map
Groundwater Contaminant Distribution Map - Naphthalene

APPENDICES

A. Standard Operating Procedures
B. Soil Boring and Monitoring Well Logs
C. Photographic Documentation
D. Field Notes
E. Laboratory Analytical Results
F. Data Validation Report
G. Underground Storage Tank Removal Report

MAPS

Site Location Map
Site Map
ANR Atlas Map
Soil Contaminant Map - B(a)P TEQ
Soil Contaminant Map - VOCs
Groundwater Contour Map
Groundwater Contaminant Concentration Map
Groundwater Contaminant Distribution Map - Naphthalene



1705 Route 128
Westford, Vermont

LE·Environmental

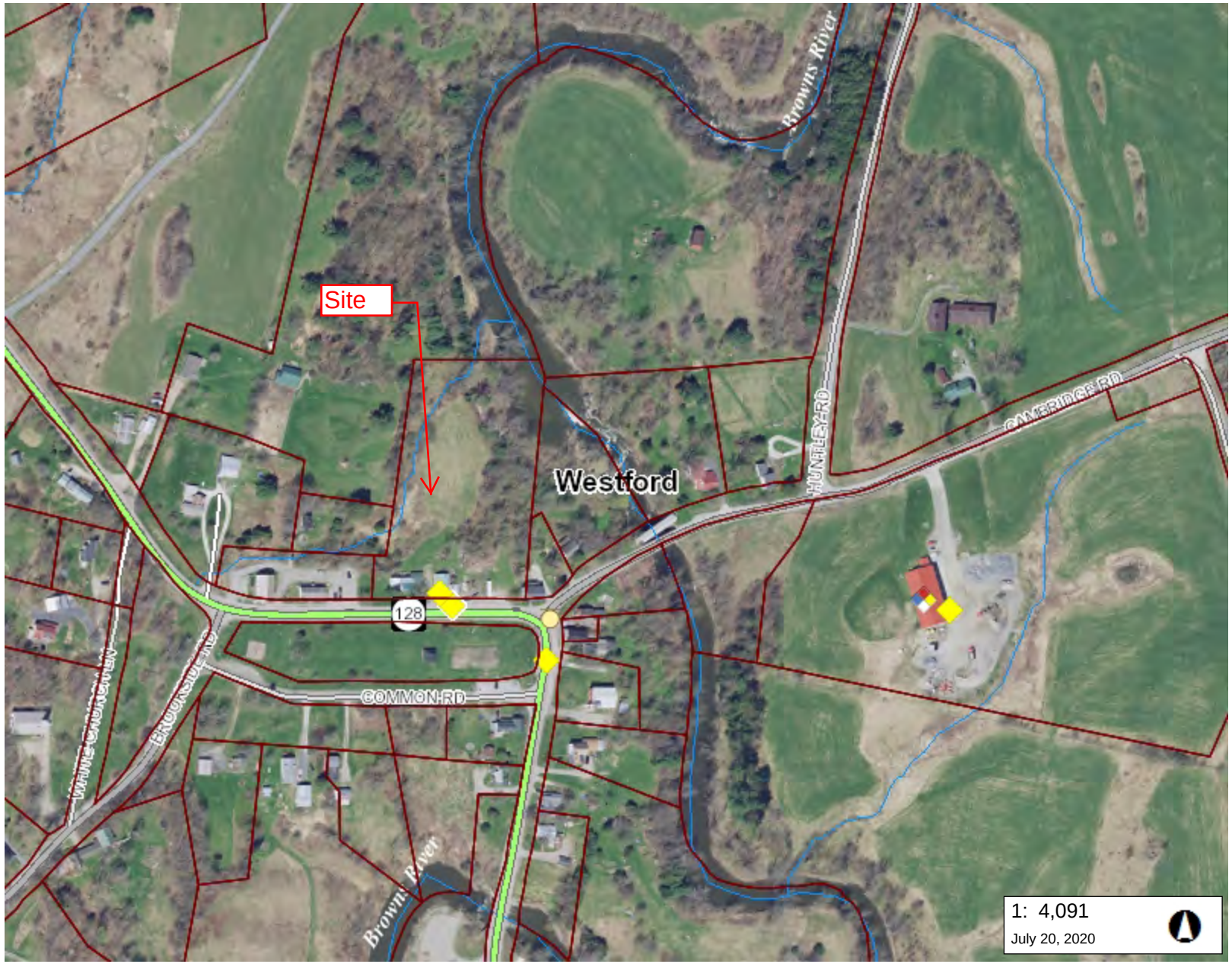
Site Location Map

LEE# 19-139
Date: September 6, 2019
Source: USGS Store

1705 Route 128

Vermont Agency of Natural Resources

vermont.gov



LEGEND

- Hazardous Site
- Hazardous Waste Generators
- Brownfields
- Salvage Yard
- Aboveground Storage Tank
- Underground Storage Tank (w
- Dry Cleaner
- Parcels (standardized)
- Parcels (non-standardized)
- Roads
  - Interstate
  - Principal Arterial
  - Minor Arterial
  - Major Collector
  - Minor Collector
  - Local
  - Not part of function Classification S
- Stream/River
- Town Boundary

NOTES

Map created using ANR's Natural Resources Atlas

208.0 0 104.00 208.0 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 341 Ft. 1cm = 41 Meters

THIS MAP IS NOT TO BE USED FOR NAVIGATION

LE·Environmental
21 North Main Street Unit #1
Waterbury, Vermont
Phone: 802-917-2001
www.leenv.net

Site Map
Pigeon Property
1705 Route 128
Westford, Vermont

Legend
- Soil Boring
- Monitoring Well
- Supply Well
- Drain Line
- Former Gas UST

Drawing Date: 7/15/20
LEE Project #: 19-138

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Waterbury, Vermont
Phone: 802-917-2001
www.leenv.net

Soil Contaminant Map
B[a]P TEQ
Pigeon Property
1705 Route 128
Westford, Vermont

Legend
- Soil boring/soil sample with B[a]P TEQ concentrations reported in (mg/kg) Exceedance of VT urban background in bold
- Former gasoline UST

Sample Dates: 6/2, 6/5/20
Drawing Date: 7/15/20
LEE Project #: 19-138

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Phone: 802-917-2001
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VOCs in Soil Contaminant Map Pigeon Property 1705 Route 128 Westford, Vermont

Legend
- Soil boring/soil sample with VOC concentration exceeding residential standards noted in call-out boxes (mg/kg)
- Former gasoline UST

Sample Dates: 6/2, 6/5/20
Drawing Date: 7/15/20
LEE Project #: 19-138

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Groundwater Contour Map
Pigeon Property
1705 Route 128
Westford, Vermont
LEE Project # 19-138

Legend
- Soil Boring
- Monitoring well-elevations in feet
- Arrow denotes approximate groundwater flow
- B Benchmark 100'

Measure Date: 6/17/20
Drawing Date: 7/15/20

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Groundwater Contaminant Concentration Map
Pigeon Property
1705 Route 128
Westford, Vermont
LEE Project # 19-138

Legend
GW Monitoring Well with total VOCs concentrations (ug/L)
Regulatory exceedances in call-out boxes
Sampled via EPA Method 8260
Sample Date: 6/17/20
Drawing Date: 7/15/20

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Groundwater Contaminant Distribution Map-Naphthalene
Pigeon Property
1705 Route 128
Westford, Vermont
LEE Project # 19-138

Legend
GW Monitoring Well with Naphthalene concentrations in excess of VGES (ug/L)
Distribution lines dashed where inferred
Sampled via EPA Method 8260
Sample Date: 6/15/20
Drawing Date: 7/15/20

APPENDIX A

Standard Operating Procedures

Field Standard Operating Procedures used during this work:

- LEE SOP A: Soil Sampling
- LEE SOP B: Soil Borings, Groundwater Monitoring Well Installation and Low flow groundwater sampling
- LEE SOP E: Sample Handling
- LEE SOP F: PID Operation
- LEE SOP G: pH Conductivity and Temperature Meter Operation

APPENDIX B

Monitoring Well and Soil Boring Logs

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SOIL BORING LOG/GROUNDWATER MONITORING WELL COMPLETION DIAGRAM SHEET 1 OF 1

1705 Route 128, Westford, Vermont

June 5, 2020 DRILLER T&K Drilling

LEE Project # 19-138 ON-SITE REP. Angela Emerson

BORING NO. / WELL NO. SB-1 / MW-5

TOP OF CASING ELEVATION 81.18

REFUSAL: DEPTH Not Encountered

TOP OF ROCK: DEPTH Not Encountered

BOTTOM OF HOLE DEPTH: DEPTH 12.0 FT.

BORING ADVANCED BY: GEOPROBE

WATER LEVEL DATA (IF APPLICABLE)

COMPLETION: DEPTH 7 FT.

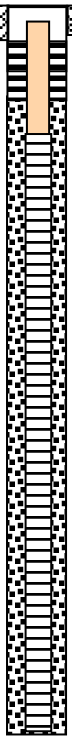
ELEV. 74 FT.

MONITOR DATE: DEPTH 10.97 FT.

ELEV. 70.21 FT.

STRATUM DEPTH FT.	STRATUM DEPTH ELEV.	STRATUM DESCRIPTION	PENETRATION/ RECOVERY (")	FIELD RESULTS Blow Counts	FIELD RESULTS PID (ppm)
0.0	81.81	Silty Sand (SM): dry, medium brown, fine to coarse sand, some silt.	36/36	N/A	0.2
3.0	78.8				
		Lean Clay (CL): moist to wet, medium brown, clay. Fine-medium sand layers noted at 7' and 8.5' bg.	36/32	N/A	0.2
6.0	75.8				
		Lean Clay (CL): wet, medium brown, clay.	36/0	N/A	N/A
9.0	72.8				
			36/6	N/A	0.2
12.0	69.8				

WELL DESIGN



WELL CONSTRUCTION DETAILS

SOIL SAMPLING DETAILS

STEEL ROADBOX FLUSH MOUNTED IN GRASS LOT

BENTONITE SEAL 0.5-1.5' BG

1" PVC RISER 0.5-2' BG

DRILLERS SAND 1.5-12' BG

10' LENGTH OF 0.010 SLOT PVC PLASTIC WELL SCREEN 2-12' BG

COLLECTED SOIL SAMPLE SB-1 FROM 0-1.5' BG

LEE Environmental

SOIL BORING LOG

1705 Route 128, Westford, Vermont

June 5, 2020

LEE Project # 19-138

SHEET 1 OF 1

DRILLER T&K Drilling

ON-SITE REP. Angela Emerson

BORING NO. SB-2

REFUSAL: DEPTH Not Encountered

TOP OF ROCK: DEPTH Not Encountered

BOTTOM OF HOLE DEPTH: DEPTH 15 FT.

BORING ADVANCED BY: Geoprobe

STRATUM DEPTH FT.	STRATUM DESCRIPTION	PENETRATION/ RECOVERY (")	FIELD RESULTS		SOIL SAMPLING DETAILS
			Blow Counts	PID (ppm)	
3	Well Graded Sand with Silt (SW-SM): dry, medium brown, fine to coarse sand, trace silt. Fill. Petroleum odor.	36/28	N/A	193.0	COLLECTED SOIL SAMPLE SB-2S FROM 0-1.5' BG COLLECTED SOIL SAMPLE SB-2D FROM 13-15' BG NO GROUNDWATER ENCOUNTERED
6	Well Graded Sand with Silt (SW-SM): dry, medium brown, fine to coarse sand, trace silt. Fill. Petroleum odor.	36/36	N/A	458.1	
9	Lean Clay (CL): wet, medium brown, clay. Petroleum odor.	36/36	N/A	167.6	
12	Lean Clay (CL): wet, medium brown, clay. Petroleum odor.	36/36	N/A	65.6	
15	Lean Clay (CL): wet, medium brown, clay. Petroleum odor. Fine sand layers at 13' and 14' BG.	36/36	N/A	1,392	

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SOIL BORING LOG/GROUNDWATER MONITORING WELL COMPLETION DIAGRAM SHEET 1 OF 1

1705 Route 128, Westford, Vermont

June 5, 2020 DRILLER T&K Drilling

LEE Project # 19-138 ON-SITE REP. Angela Emerson

BORING NO. / WELL NO. SB-3 / MW-1

TOP OF CASING ELEVATION 99.22

REFUSAL: DEPTH Not Encountered

TOP OF ROCK: DEPTH Not Encountered

BOTTOM OF HOLE DEPTH: DEPTH 15 FT.

BORING ADVANCED BY: GEOPROBE

WATER LEVEL DATA (IF APPLICABLE)

COMPLETION: DEPTH 9 FT.

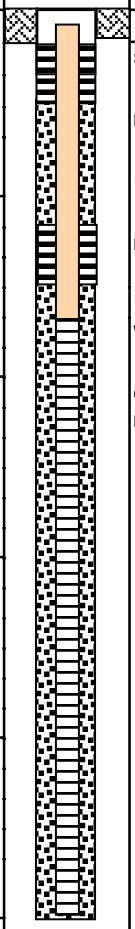
ELEV. 90 FT.

MONITOR DATE: DEPTH 4.45 FT.

ELEV. 94.77 FT.

STRATUM DEPTH FT.	STRATUM DEPTH ELEV.	STRATUM DESCRIPTION	PENETRATION/ RECOVERY (")	FIELD RESULTS Blow Counts	FIELD RESULTS PID (ppm)
0.0	99.2	Well Graded Sand with Silt (SW-SM): dry, medium brown, fine to coarse sand, trace silt, trace gravel. Fill. Petroleum odor.	36/36	N/A	1,443
3.0	96.2	Well Graded Sand with Silt (SW-SM): dry, medium brown, fine to coarse sand, trace silt, trace gravel. Fill. Petroleum odor.	36/8	N/A	2,320
6.0	93.2	Lean Clay (CL): dry to moist, medium brown, clay. Petroleum odor.	36/36	N/A	409.4
9.0	90.2	Lean Clay (CL): dry to wet, medium brown and gray, clay. Petroleum odor.	36/36	N/A	483.3
12.0	87.2	Lean Clay (CL): dry to wet, medium brown and gray, clay. Petroleum odor.	36/36	N/A	913.9
15.0	84.2				

WELL DESIGN



WELL CONSTRUCTION DETAILS

SOIL SAMPLING DETAILS

STEEL ROADBOX FLUSH MOUNTED IN CEMENT

BENTONITE SEALS 0.5-1.5' BG AND 3.5-4.5'

1" PVC RISER 0.5-5' BG

DRILLERS SAND 1.5-3.5', AND 4.5-15' BG

10' LENGTH OF 0.010 SLOT PVC PLASTIC WELL SCREEN 5-15' BG

COLLECTED SOIL SAMPLE UST-1, 6' BG IN SAME LOCATION

LEE Environmental

SOIL BORING LOG

1705 Route 128, Westford, Vermont

June 5, 2020

LEE Project # 19-138

SHEET 1 OF 1

DRILLER T&K Drilling

ON-SITE REP. Angela Emerson

BORING NO. SB-4

REFUSAL: DEPTH Not Encountered

TOP OF ROCK: DEPTH Not Encountered

BOTTOM OF HOLE DEPTH: DEPTH 15 FT.

BORING ADVANCED BY: Geoprobe

STRATUM DEPTH FT.	STRATUM DESCRIPTION	PENETRATION/ RECOVERY (")	FIELD RESULTS		SOIL SAMPLING DETAILS
			Blow Counts	PID (ppm)	
3	Well Graded Sand with Silt (SW-SM): dry, medium brown, fine to coarse sand, trace silt, trace gravel. Fill. Weathered petroleum odor.	36/36	N/A	1.8	COLLECTED SOIL SAMPLE SB-4S FROM 0-1.5' BG COLLECTED SOIL SAMPLE SB-4D FROM 9-11' BG GROUNDWATER ENCOUNTERED 9' BG
6	Silty Sand (SM): dry to moist, dark brown, fine to coarse sand with with, trace gravel. Weathered petroleum odor.	36/36	N/A	1.7	
9	Lean Clay (CL): dry to moist, medium brown, clay. Fine sand lens at 7' BG. Petroleum odor.	36/36	N/A	29.4	
12	Poorly Graded Sand (SP): wet, dark brown and gray, medium and coarse grained Sand. Weathered petroleum odor.	36/36	N/A	39.4	
15	Sandy Lean Clay (CL): wet, medium brown and gray, clay with some fine to coarse sand. Weathered petroleum odor.	36/36	N/A	12.4	

SOIL BORING LOG/GROUNDWATER MONITORING WELL COMPLETION DIAGRAM SHEET 1 OF 1

LEE Environmental

1705 Route 128, Westford, Vermont

June 5, 2020 DRILLER T&K Drilling

LEE Project # 19-138 ON-SITE REP. Angela Emerson

BORING NO. / WELL NO. SB-5 / MW-2

TOP OF CASING ELEVATION 99.74

REFUSAL: DEPTH Not Encountered

TOP OF ROCK: DEPTH Not Encountered

BOTTOM OF HOLE DEPTH: DEPTH 15 FT.

BORING ADVANCED BY: GEOPROBE

WATER LEVEL DATA (IF APPLICABLE)

COMPLETION: DEPTH 9 FT.

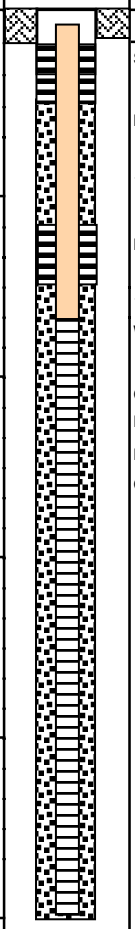
ELEV. 91 FT.

MONITOR DATE: DEPTH 6.26 FT.

ELEV. 93.48 FT.

STRATUM DEPTH FT.	STRATUM DEPTH ELEV.	STRATUM DESCRIPTION	PENETRATION/ RECOVERY (")	FIELD RESULTS Blow Counts	FIELD RESULTS PID (ppm)
0.0	99.7	Well-graded Sand (SW): dry, medium brown, fine to coarse sand, trace gravel. Fill.	36/36	N/A	0.4
3.0	96.7	Silty Sand (SM): dry, medium brown, fine to coarse sand, trace gravel.	36/9	N/A	0.2
6.0	93.7	Sandy Lean Clay (CL): wet, medium brown and gray, clay with some fine to coarse sand. Not enough recovery to collect laboratory sample. Slight petroleum odor.	36/2	N/A	14.1
9.0	90.7	Lean Clay (CL): wet, medium brown and gray, clay. Slight petroleum odor.	36/36	N/A	2.7
12.0	87.7	Lean Clay (CL): moist to wet, medium brown, clay. Fine-medium sand layers noted at 13' and 13.5' bg.	36/36	N/A	2.1
15.0	84.7				

WELL DESIGN



WELL CONSTRUCTION DETAILS

SOIL SAMPLING DETAILS

STEEL ROADBOX FLUSH MOUNTED IN CEMENT

BENTONITE SEALS 0.5-1.5' BG AND 3.5-4.5'

1" PVC RISER 0.5-5' BG

DRILLERS SAND 1.5-3.5', AND 4.5-15' BG

10' LENGTH OF 0.010 SLOT PVC PLASTIC WELL SCREEN 5-15' BG

COLLECTED SOIL SAMPLE SB-5 FROM 9-10' BG
HIGHEST PID READING OBTAINED FROM 6-9' BG RUN, BUT LOW RECOVERY PROHIBITIED SAMPLE COLLECTION FROM THIS RUN

SOIL BORING LOG/GROUNDWATER MONITORING WELL COMPLETION DIAGRAM SHEET 1 OF 1

LEE Environmental

1705 Route 128, Westford, Vermont

June 5, 2020 DRILLER T&K Drilling

LEE Project # 19-138 ON-SITE REP. Angela Emerson

BORING NO. / WELL NO. SB-6 / MW-3

TOP OF CASING ELEVATION 99.03

REFUSAL: DEPTH Not Encountered

TOP OF ROCK: DEPTH Not Encountered

BOTTOM OF HOLE DEPTH: DEPTH 15 FT.

BORING ADVANCED BY: GEOPROBE

WATER LEVEL DATA (IF APPLICABLE)

COMPLETION: DEPTH 12 FT.

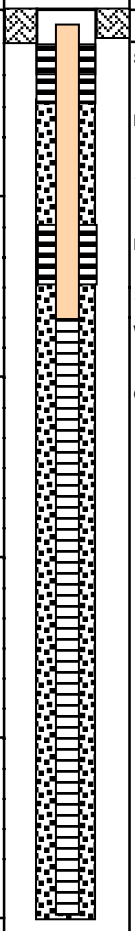
ELEV. 87 FT.

MONITOR DATE: DEPTH 11.59 FT.

ELEV. 87.44 FT.

STRATUM DEPTH FT.	STRATUM DEPTH ELEV.	STRATUM DESCRIPTION	PENETRATION/ RECOVERY (")	FIELD RESULTS Blow Counts	FIELD RESULTS PID (ppm)
0.0	99.0	Silty Sand (SM): dry, medium brown, fine to coarse sand, some silt. Gravel fill top 15."	36/36	N/A	1.3
3.0	96.0				
		Sandy Lean Clay (CL): dry to wet, medium brown and gray, clay with some fine sand. Slight petroleum odor.	36/36	N/A	0.6
6.0	93.0				
		Lean Clay (CL): dry to moist medium brown and gray, clay. Slight petroleum odor.	36/36	N/A	0.2
9.0	90.0				
		Lean Clay (CL): dry to moist medium brown and gray, clay. Slight petroleum odor.	36/36	N/A	0.2
12.0	87.0				
		Lean Clay (CL): wet, medium brown, clay. Several fine sand layers noted.	36/36	N/A	0.2
15.0	84.0				

WELL DESIGN



WELL CONSTRUCTION DETAILS

SOIL SAMPLING DETAILS

STEEL ROADBOX FLUSH MOUNTED IN CEMENT

BENTONITE SEALS 0.5-1.5' BG AND 3.5-4.5'

1" PVC RISER 0.5-5' BG

DRILLERS SAND 1.5-3.5', AND 4.5-15' BG

10' LENGTH OF 0.010 SLOT PVC PLASTIC WELL SCREEN 5-15' BG

COLLECTED SOIL SAMPLE SB-6 FROM 0-1.5' BG

SOIL BORING LOG/GROUNDWATER MONITORING WELL COMPLETION DIAGRAM SHEET 1 OF 1

LEE Environmental

1705 Route 128, Westford, Vermont

June 5, 2020 DRILLER T&K Drilling

LEE Project # 19-138 ON-SITE REP. Angela Emerson

BORING NO. / WELL NO. SB-7 / MW-4

TOP OF CASING ELEVATION 98.68

REFUSAL: DEPTH Not Encountered

TOP OF ROCK: DEPTH Not Encountered

BOTTOM OF HOLE DEPTH: DEPTH 15 FT.

BORING ADVANCED BY: GEOPROBE

WATER LEVEL DATA (IF APPLICABLE)

COMPLETION: DEPTH 12 FT.

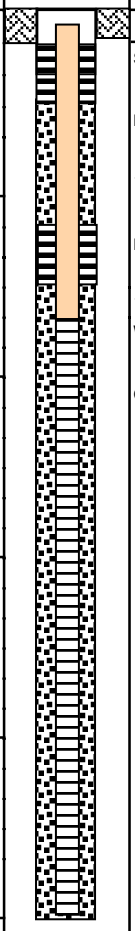
ELEV. 87 FT.

MONITOR DATE: DEPTH 11.07 FT.

ELEV. 87.61 FT.

STRATUM DEPTH FT.	STRATUM DEPTH ELEV.	STRATUM DESCRIPTION	PENETRATION/ RECOVERY (")	FIELD RESULTS Blow Counts	FIELD RESULTS PID (ppm)
0.0	98.7	Silty Sand (SM): dry, medium brown, fine to coarse sand, some silt. Gravel fill top 18."	36/26	N/A	0.3
3.0	95.7	Lean Clay (CL): dry, medium brown and gray, clay.	36/36	N/A	0.2
6.0	92.7	Lean Clay (CL): dry, medium brown and gray, clay. Fine sand layer at 8' BG and 1 cm thick varves from 8-9' BG	36/36	N/A	0.3
9.0	89.7	Lean Clay (CL): dry, medium brown and gray, clay. 1 cm thick varves from throughout	36/36	N/A	0.1
12.0	86.7	Lean Clay (CL): moist to wet, medium brown, clay. Several fine sand layers noted.	36/36	N/A	0.1
15.0	83.7				

WELL DESIGN



WELL CONSTRUCTION DETAILS

SOIL SAMPLING DETAILS

STEEL ROADBOX FLUSH MOUNTED IN CEMENT

BENTONITE SEALS 0.5-1.5' BG AND 3.5-4.5'

1" PVC RISER 0.5-5' BG

DRILLERS SAND 1.5-3.5', AND 4.5-15' BG

10' LENGTH OF 0.010 SLOT PVC PLASTIC WELL SCREEN 5-15' BG

COLLECTED SOIL SAMPLE SB-7 FROM 0-1.5' BG

APPENDIX C

Photographic Documentation

Photographic Documentation
Phase II Environmental Site Assessment
1705 Route 128
Westford, Vermont
LEE #19-138

Photograph ID: 001 Date: June 2, 2020 Location: Former UST area Direction: Looking south Comments: Top of gasoline UST. Unknown pipe noted south of the UST circled.	
Photograph ID: 002 Date: June 2, 2020 Location: Parking lot Direction: Looking east Comments: Various piping removed from the UST excavation	

Photographic Documentation
Phase II Environmental Site Assessment
1705 Route 128
Westford, Vermont
LEE #19-138

Photograph ID: 003 Date: June 2, 2020 Location: Southern portion of Site Direction: Looking east Comments: Removing gasoline UST	
Photograph ID: 004 Date: June 2, 2020 Location: Southern portion of Site Direction: Looking north Comments: Removed gasoline UST. Large holes noted throughout the bottom of the UST	

Photographic Documentation
Phase II Environmental Site Assessment
1705 Route 128
Westford, Vermont
LEE #19-138

Photograph ID: 005 Date: June 5, 2020 Location: Center of site Direction: Looking north Comments: Drilling SB-7/MW-4	
Photograph ID: 006 Date: June 5, 2020 Location: Center of site Direction: Looking northwest Comments: Drilling SB-7/MW-4	

Photographic Documentation
Phase II Environmental Site Assessment
1705 Route 128
Westford, Vermont
LEE #19-138

Photograph ID: 007 Date: June 5, 2020 Location: Center of site Direction: Looking southeast Comments: Drilling SB-6/MW-3	
Photograph ID: 008 Date: June 5, 2020 Location: North of garage Direction: Looking west Comments: Drilling SB-5/MW-2	

Photographic Documentation
Phase II Environmental Site Assessment
1705 Route 128
Westford, Vermont
LEE #19-138

Photograph ID: 009 Date: June 5, 2020 Location: Parking lot on eastern portion of Site Direction: Looking east Comments: Drilling SB-4	
Photograph ID: 010 Date: June 5, 2020 Location: Former UST area Direction: Looking west Comments: Drilling SB-3/MW-1	

Photographic Documentation
Phase II Environmental Site Assessment
1705 Route 128
Westford, Vermont
LEE #19-138

Photograph ID: 011 Date: June 5, 2020 Location: Former dispenser area Direction: Looking west Comments: Drilling SB-2	
Photograph ID: 012 Date: June 5, 2020 Location: Northern portion of Site Direction: Looking south Comments: Drilling SB-1/MW-5	

APPENDIX D

Field Notes

1705 ROUTE 128
WESTFORD, VT
SOIL SAMPLING FIELD FORM
JOB # 19-138

DATE: 6/2/20 INSPECTORS(S): AE/ARL

Equipment Needed: PID, Mag, Handauger, EAI containers, markers, chain of custody, decon equipment (coolers, gloves, alconox, distilled water, etc.), peristaltic pump, tubing

TASK 1: Remove gasoline UST in accordance with DEC guidance. One soil sample and one duplicate sample will be collected beneath the presumed gasoline UST and it will be submitted for laboratory analysis of the following constituents:

- **VOCs via EPA Method 8260c;**
- **PAHs via EPA Method 8270d; and,**
- **RCRA 8 Metals via EPA Method 6020.**

If it is determined there has been a release of petroleum from this tank, and if the contents (or former contents) cannot be clearly identified, a fingerprint analysis of the fuel type will be performed. In this instance, one soil sample will be collected from the area with the highest recorded contamination, which will be determined via PID readings obtained in the field, and the sample will be submitted for laboratory analysis of:

- **TPH 8100 Hydrocarbon Fingerprint ID**

UST SOIL SAMPLES

Sample #	Time	Location/Depth	PID
UST-1	1545	BOT	1644
Duplicate	1545	BOT	1644

1705 ROUTE 128
WESTFORD, VT
SOIL SAMPLING FIELD FORM
JOB # 19-138

DATE: 6/5/20 INSPECTORS(S): AE

Task 2: Drilling - A geoprobe drill rig will be utilized to advance seven soil borings at the exterior locations as shown on the Proposed Phase II ESA Site Map.

Continuous soil sampling will be conducted during soil boring advancement. Soil samples will be screened for VOCs using a calibrated PID. The samples will be collected from the soil horizon exhibiting the greatest degree of contamination in the field as evidenced by PID reading, staining, or odor. If there is no indication of contamination, then the soil sample will be collected from 0-1.5' bg to gauge surface soil conditions.

If sufficient groundwater is encountered during soil boring advancement (more than 12"), groundwater monitoring wells will be installed and groundwater testing will be conducted. A 1" diameter PVC groundwater monitoring well will be installed in the soil boring. Each well will have up to a 10' well screen spanning the water table. Each well will be developed following its installation with a peristaltic pump.

Soil samples will be submitted for laboratory analysis of the following contaminants of concern, and a duplicate will be collected (total of eight samples):

- **VOCs via EPA Method 8260c**
- **PAHs via EPA Method 8270d**
- **RCRA 8 Metals via EPA Method 6020**

One grab soil sample will also be collected from soil borings SB-2 through SB-7 for the following constituent:

- **Polychlorinated biphenyl compounds (PCBs) via EPA Method 8082**

1705 ROUTE 128
WESTFORD, VT
SOIL SAMPLING FIELD FORM
JOB # 19-138

SOIL SAMPLES

Sample #	Time	Location/Depth	PID	VOA ID
SB-6	0900	0-1.5'	1.3	50629
SB-7	0925	0-1.5	0.3	50626
SB-5	1010	9-10 ~~0-2~~	~~0.4~~ 2.7	50625
Duplicate	"	"	"	50622
SB-4S	1100	0-1.5	~~1.8~~	50621
SB-4D	1110	9-11	39.4	50769
SB-25	1215	0-1.5	193.0	50619
SB-2D	1235	13-15'	1392	50623
SB-1	1300	0-1.5	0.2	No PCB Here

LE Environmental LLC
Pigeon Property
Groundwater monitoring
Field Data Form

Per approved work plan

Collect one groundwater sample from MW-1, 2, 3, 4, and 5:
- VOCs (M8260c) (2-40 ml glass vials pre-preserved with HCl)
- RCRA 8 Metals

Collect one duplicate sample
Submit EAI prepared gw trip blank for M8260c analysis
Collect a DWS as well

Equipment

LE Equipment
- pH/Conductivity Meter
- Truck
- Hand Tools
- 5-gallon pails
- WLI
- Peristaltic pump and tubing
- Deep cycle battery

Geotech Equipment
- Turbidity Meter

Supplies

LE Supplies
- Bailers
- Rope
- plastic containers (for field measurements)
- paper towels
- baggies
- gloves
- pens
- water
- soap

EAI Supplies
- Cooler, 5 sets Bottles, COC form

LE Environmental LLC
Pigeon Property **Monitoring Well MW-1**
Groundwater monitoring
Field Data Form

Technician: AE/AL

Date: 6/17/2020

Location: 1

Depth to Water: 4.45'

Time	pH	Cond	Temp	Turb
0957	6.31	7.19	14.4	189
1002	6.36	7.71	15.7	792
1005	6.27	7.46	16.0	138

* Dewatered 1005
* Sampled 1030
* Duplicate here

LE Environmental LLC
Pigeon Property
Groundwater monitoring
Field Data Form

Monitoring Well MW-2

Technician: AE | AL

Date: 6/17/20

Depth to Water: 6.26'

Time	pH	Cond	Temp	Turb
0850	6.39	555	12.4	419
0855	6.64	568	11.7	842
0859	6.41	520	12.3	173

*Dewatered at 0902

*Sampled 1010

LE Environmental LLC
Pigeon Property **Monitoring Well MW-3**
Groundwater monitoring
Field Data Form

Technician: AE/AL

Date: 6/17/20

Depth to Water: 11.59

Time	pH	Cond	Temp	Turb
0924	6.69	103.9	13.1	113

* Dewatered 0927
* Sampled 1150
Not enough H_2O for metals

LE Environmental LLC
Pigeon Property
Groundwater monitoring
Field Data Form

Monitoring Well MW-4

Technician: AE / AL

Date: 6/3/20

Depth to Water: 11.07

Time	pH	Cond	Temp	Turb
0935	6.85	1017	13.8	46.8
0940	6.78	1006	15.0	910

Dewatered
0940

LE Environmental LLC
Pigeon Property **Monitoring Well MW-5**
Groundwater monitoring
Field Data Form

Technician: AE/AL

Date: 6/17/20

Depth to Water: 10.97

Time	pH	Cond	Temp	Turb
1045	7.01	228	14.6	>

*Dewatered immediately

*No metals

6/2/20 1705 Route 128 - #19-138
UST Removal

Miles
62

- Weather Cloudy ~50°F
- Arrived on-Site 8:30
- NRC on-Site 9:00
- Uncovered UST - strong petroleum odor noted just below grade
- 1,000 gallon gasoline UST - piping on top appears to be former vent pipe and dispenser pipes
- UST 12' x 4' - Excavation 20' x 9.5'
- Groundwater at bottom of excavation ~6' bg

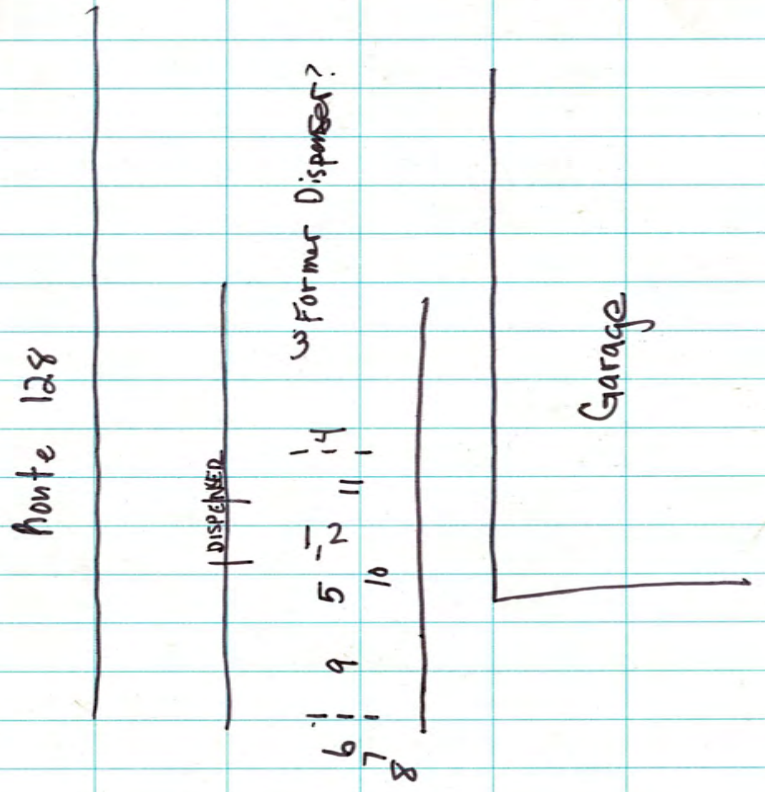
6/2/20 1705 Rte 128 - UST Removal #19-138

Sample #	Location/Depth	Type	PID
1	TOT/6"	Gray + Brn F-C Sand, some gravel	705.4
2	TOT/18"	"	61.0
3	UNDER DISP. ISLAND/18"	"	17.1
4	SOT/30"	D.Brn. FS + Silt some gravel	926.2
5	TOT/18"	F-C Sand, some gravel	2374
6	EOT/18"	F Sand + Silt	212.4
7	SOT/60"	M-C Sand and gravel	7558
8	SOT 60"	wet, dark gray, silt & F. Sand	1440
* 9	BOT 6'	Wet, gray clay	1644
10	BOT 6'	"	1624
11	BOT 6'	"	1286

Rite in the Rain

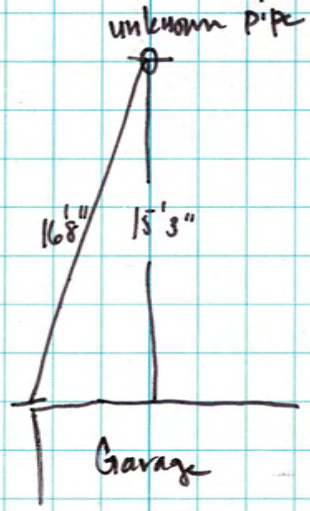
6/2/20 1705 Rte 128 #19-138

UST Removal



6/2/20 1705 Rte 128 #19-138

UST Removal

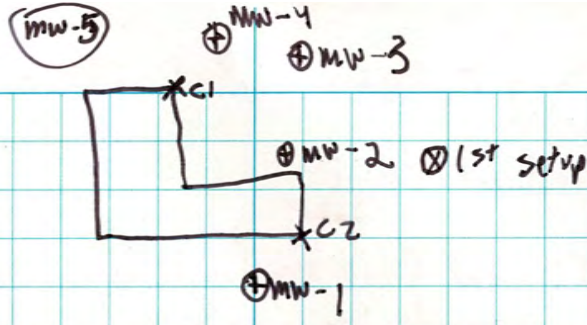


6/5/20 1705 Route 128
Westford, VT

* Arrived 0800. Drillers arrived 0800

* Weather Sunny ~80°

* No sample from SB-3 since we sampled UST pit - will add sample to SB-2



Point	Low	MID	HIGH	ANGLE
MW-1	4' 7½"	4' 10⅝"	5' 1⅝"	290°
C-2	3' 10⅝"	4' 1¼"	4' 3¾"	300°
MW-2	4' 2¾"	4' 4⅜"	4' 6"	335°
MW-3	4' 11⅝"	5' 7/8"	5' 2⅜"	58°
C1	3' 4⅞"	3' 7½"	3' 10¼"	8°
MW4	5' 1⅝"	5' 5⅛"	5' 8⅝"	46°
~~MW4~~	~~3' 5⅛"~~	~~3' 6¼"~~	~~3' 7⅜"~~	~~46~~
	1' 11⅞"	2' 1⅛"	2' 2½"	140
MW-5	15' 2⅝"	15' 8⅛"	16' 1¼"	270°

↳ measure T.C - Top Stake
Add = 47"

Appendix E

Laboratory Analytical Results

Liquid Level Monitoring Data
Brownfields Phase II ESA
Pigeon Property
1705 Route 128
Westford, Vermont

Measurement Date: June 17, 2020

Well I.D.	Top of Casing Elevation	Depth To Product btoc	Depth To Water btoc	Product Thickness	Specific Gravity Of Product	Water Equivalent	Corrected Depth To Water	Corrected Water Table Elevation
MW-1	99.22	-	4.45	-	-	-	-	94.77
MW-2	99.74	-	6.26	-	-	-	-	93.48
MW-3	99.03	-	11.59	-	-	-	-	87.44
MW-4	98.68	-	11.07	-	-	-	-	87.61
MW-5	81.18	-	10.97	-	-	-	-	70.21

Notes:
All Values Reported in Feet
btoc - Below Top of Casing
Elevation data relative to 100' at SE corner of garage

Brownfields Phase II Environmental Site Assessment
Pigeon Property
Westford, Vermont
Soil Data Summary
Page 1 of 11

Sample Identification	UST-1	Dup UST-1	SB-1	SB-2S	SB-2D	SB-4S	SB-4D	SB-5	SB-6	SB-7	Dup SB-5	*EPA Residential RSL (mg/kg)*	*EPA Industrial RSL (mg/kg)*	*VSS Residential (mg/kg)*	*VSS Non-Residential (mg/kg)*
Sample Depth (ft. bg)	6	6	0-1.5	0-1.5	13-15	0-1.5	9-11	9-10	0-1.5	0-1.5	9-10				
PID Reading (ppm)	1,644	1,644	0.2	193.0	1,392	1.8	39.4	2.7	1.3	0.3	2.7				
Sample Date	6/2/20	6/2/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20				
VOCs, EPA Method 8260C (mg/kg)															
Dichlorodifluoromethane	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	87	370	-	-
Chloromethane	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	110	460	-	-
Vinyl Chloride	ND<0.03	ND<0.02	ND<0.02	ND<0.02	ND<0.03	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.03	-	-	0.10	0.59
Bromomethane	ND<0.2	ND<0.2	ND<0.1	ND<0.2	ND<0.1	ND<0.2	ND<0.2	ND<0.1	ND<0.2	ND<0.2	ND<0.1	6.8	30	-	-
Chloroethane (ethyl chloride)	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	14,000	57,000	-	-
Trichlorofluoromethane	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	23,000	350,000	-	-
Diethyl Ether	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.7	-	-	-	-
Acetone	ND<3	ND<2	ND<2	ND<2	ND<3	ND<2	ND<2	ND<2	ND<2	ND<2	ND<3	-	-	40,609	100,028
1 ,1-Dichloroethene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	230	1,000	-	-
Methylene chloride	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	57	1,000	-	-
Carbon disulfide	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	-	-	608	662
MTBE	ND<0.1	ND<0.1	ND<0.1	ND<0.1	**1.8**	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	-	-	649	4,464
trans-1,2-Dichloroethene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	1,402	18,137
1,1-Dichloroethane	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	2.1	13
2,2-Dichloropropane	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	-	-
cis-1,2-Dichloroethene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	140	1,814
2-Butanone (MEK)	ND<0.6	ND<0.6	ND<0.6	ND<0.5	ND<0.6	ND<0.5	ND<0.5	ND<0.6	ND<0.5	ND<0.5	ND<0.7	-	-	16,952	26,991
Bromochloromethane	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	193	597
Tetrahydrofuran(THF)	ND<0.6	ND<0.6	ND<0.6	ND<0.5	ND<0.6	ND<0.5	ND<0.5	ND<0.6	ND<0.5	ND<0.5	ND<0.7	-	-	-	-
Chloroform	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	0.32	1.4	-	-
1,1,1-Trichloroethane	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	8,100	36,000	-	-
Carbon tetrachloride	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	0.37	2.2
1 ,1-Dichloropropene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	-	-
Benzene	**43**	**32**	ND<0.06	ND<0.05	**8.7**	ND<0.05	**0.079**	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	0.70	4.2
1,2-Dichloroethane	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	0.29	1.7
Trichloroethene (TCE)	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	0.68	6.5
1,2-Dichloropropane	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	1.5	9.1
Dibromomethane	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	24	99	-	-
Bromodichloromethane	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	0.29	1.3	-	-
4-Methyl-2-pentanone(MIBK)	ND<0.6	ND<0.6	ND<0.6	ND<0.5	ND<0.6	ND<0.5	ND<0.5	ND<0.6	ND<0.5	ND<0.5	ND<0.7	33,000	140,000	-	-
cis-1,3-Dichloropropene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	1.8	8.2	-	-
Toluene	**610**	**520**	ND<0.06	ND<0.05	**63**	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	706	798
trans-1,3-Dichloropropene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.6	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	1.8	8.2	-	-
1,1,2-Trichloroethane	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	1.1	5	-	-
2-Hexanone	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	200	1,300	-	-
Tetrachloroethene (PCE)	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07			2.4	14
1,3-Dichloropropane	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	1,600	23,000	-	-
Dibromochloromethane	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	8.3	39	-	-
1,2-Dibromoethane(EDB)	ND<0.03	ND<0.02	ND<0.02	ND<0.02	ND<0.03	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.03	-	-	0.02	0.14
Chlorobenzene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	414	726

NOTES:
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Blank Cell=no published value (VSS) or published value not applicable (RSL)

Brownfields Phase II Environmental Site Assessment
Pigeon Property
Westford, Vermont
Soil Data Summary

LE Environmental

Sample Identification	UST-1	Dup UST-1	SB-1	SB-2S	SB-2D	SB-4S	SB-4D	SB-5	SB-6	SB-7	Dup SB-5	*EPA Residential RSL (mg/kg)*	*EPA Industrial RSL (mg/kg)*	*VSS Residential (mg/kg)*	*VSS Non-Residential (mg/kg)*
Sample Depth (ft. bg)	6	6	0-1.5	0-1.5	13-15	0-1.5	9-11	9-10	0-1.5	0-1.5	9-10				
PID Reading (ppm)	1,644	1,644	0.2	193.0	1,392	1.8	39.4	2.7	1.3	0.3	2.7				
Sample Date	6/2/20	6/2/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20				
VOCs, EPA Method 8260C (mg/kg) (continued)															
1,1,1,2-Tetrachloroethane	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	2	8.8	-	-
Ethylbenzene	**150**	**120**	ND<0.06	ND<0.05	**22**	ND<0.05	**0.20**	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	3.7	22
mp-Xylene	**700**	**620**	ND<0.06	ND<0.05	**82**	ND<0.05	**0.22**	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	252	257
o-Xylene	**280**	**250**	ND<0.06	ND<0.05	**32**	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-		
Styrene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	6,000	35,000	-	-
Bromoform	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	19	86	-	-
IsoPropylbenzene (cumene)	**14**	**16**	ND<0.06	ND<0.05	**2.4**	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	p	264
Bromobenzene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	290	1,800	-	-
1,1,2,2-Tetrachloroethane	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	0.6	2.7	-	-
1,2,3-Trichloropropane	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	0.00311	0.07
n-Propylbenzene	**46**	**37**	ND<0.06	ND<0.05	**7.3**	ND<0.05	**0.11**	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	253	261
2-Chlorotoluene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	1,600	23,000	-	-
4-Chlorotoluene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	1,600	23,000	-	-
1,3,5-trimethylbenzene	**86**	**70**	ND<0.06	ND<0.05	**14**	ND<0.05	**0.39**	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	144*	177*
tert-Butylbenzene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	7,009	102,200
1,2,4-trimethylbenzene	**340**	**330**	ND<0.06	ND<0.05	**53**	ND<0.05	**1.0**	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	144*	177*
sec-Butylbenzene	**4.7**	**4.8**	ND<0.06	ND<0.05	**0.77**	ND<0.05	ND<0.05	**0.13**	ND<0.05	ND<0.05	ND<0.07	-	-	7,009	102,200
1,3-Dichlorobenzene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	-	-
p-Isopropyltoluene (p-cymene)	**2.6**	**2.7**	ND<0.06	ND<0.05	**0.52**	ND<0.05	ND<0.05	**0.098**	ND<0.05	ND<0.05	ND<0.07	-	-	-	-
1,4-Dichlorobenzene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	2.6	11	-	-
1,2-Dichlorobenzene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	1,800	9,300	-	-
n-Butylbenzene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	-	-	3,504	51,100
1,2-Dibromo-3-chloropropane	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	0.0053	0.064	-	-
1,2,4-Trichlorobenzene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	24	110	-	-
Hexachlorobutadiene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	1.2	5.3	-	-
Naphthalene	**54**	**43**	ND<0.1	ND<0.1	**7.6**	ND<0.1	**0.19**	ND<0.1	ND<0.1	ND<0.1	ND<0.01	-	-	2.7	16
1,2,3-Trichlorobenzene	ND<0.06	ND<0.06	ND<0.06	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.06	ND<0.05	ND<0.05	ND<0.07	63	930	-	-

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Dashed Cell=no published value (VSS) or published value not applicable (RSL)
* Standard for 1,3,5 and 1,2,4 TMB

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LE Environmental

Sample Identification	UST-1	Dup UST-1	SB-1	SB-2S	SB-2D	SB-4S	SB-4D	SB-5	SB-6	SB-7	Dup SB-5	*EPA Residential RSL (mg/kg)*	*EPA Industrial RSL (mg/kg)*	*VSS Residential (mg/kg)*	*VSS Non-Residential (mg/kg)*
Sample Depth (ft. bg)	6	6	0-1.5	0-1.5	13-15	0-1.5	9-11	9-10	0-1.5	0-1.5	9-10				
PID Reading (ppm)	1,644	1,644	0.2	193.0	1,392	1.8	39.4	2.7	1.3	0.3	2.7				
Sample Date	6/2/20	6/2/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20				
PAH EPA Method 8270D (mg/kg)															
Naphthalene	**3.5**	**3.4**	ND<0.009	**0.012**	**0.018**	ND<0.008	**0.012**	ND<0.009	**0.045**	**0.024**	ND<0.009	-	-	2.7	16
2-Methylnaphthalene	**2.6**	**2.5**	ND<0.009	**0.0082**	**0.013**	ND<0.008	**0.0094**	ND<0.009	**0.019**	**0.0092**	ND<0.009	240	3,000	-	-
1-Methylnaphthalene	**1.2**	**1.2**	ND<0.009	ND<0.007	ND<0.01	ND<0.008	**0.0094**	ND<0.009	**0.017**	ND<0.008	ND<0.009	18	73	-	-
Acenaphthylene	**0.042**	**0.036**	ND<0.009	**0.044**	ND<0.01	**0.017**	**0.038**	ND<0.009	**0.37**	**0.23**	ND<0.009	-	-	-	-
Acenaphthene	**0.011**	**0.010**	ND<0.009	ND<0.007	ND<0.01	ND<0.008	ND<0.008	ND<0.009	**0.021**	**0.011**	ND<0.009	3,600	45,000	-	-
Fluorene	**0.028**	**0.026**	ND<0.009	ND<0.007	ND<0.01	ND<0.008	ND<0.008	ND<0.009	**0.11**	**0.051**	ND<0.009	-	-	2,301	26,371
Phenanthrene	**0.066**	**0.061**	ND<0.009	**0.10**	ND<0.01	**0.049**	**0.013**	ND<0.009	**1.0**	**0.47**	ND<0.009	-	-	-	-
Anthracene	**0.016**	**0.015**	ND<0.009	**0.031**	ND<0.01	**0.011**	**0.012**	ND<0.009	**0.26**	**0.12**	ND<0.009	18,000	230,000	-	-
Fluoranthene	**0.079**	**0.079**	ND<0.009	**0.28**	ND<0.01	**0.10**	**0.082**	**0.0090**	**2.2**	**1.4**	**0.011**	-	-	2,301	26,371
Pyrene	**0.082**	**0.084**	ND<0.009	**0.26**	ND<0.01	**0.10**	**0.12**	ND<0.009	**2.2**	**1.5**	ND<0.009	1,800	23,000	-	-
Benzo(a)anthracene	**0.041**	**0.041**	ND<0.009	**0.15**	ND<0.01	**0.052**	**0.033**	ND<0.009	**1.4**	**0.97**	ND<0.009	1.1	21	-	-
Chrysene	**0.047**	**0.046**	ND<0.009	**0.16**	ND<0.01	**0.058**	**0.039**	ND<0.009	**1.4**	**1.0**	ND<0.009	110	2,100	-	-
Benzo(b)fluoranthene	**0.087**	**0.083**	ND<0.009	**0.23**	ND<0.01	**0.084**	**0.15**	ND<0.009	**2.2**	**1.5**	ND<0.009	1.1	21	-	-
Benzo(k)fluoranthene	**0.033**	**0.031**	ND<0.009	**0.075**	ND<0.01	**0.027**	**0.051**	ND<0.009	**0.76**	**0.56**	ND<0.009	11	210	-	-
Benzo(a)pyrene	**0.067**	**0.064**	ND<0.009	**0.16**	ND<0.01	**0.065**	**0.12**	ND<0.009	**1.9**	**1.3**	ND<0.009	-	-	0.07	1.54
Indeno(1,2,3-cd)pyrene	**0.066**	**0.059**	ND<0.009	**0.097**	ND<0.01	**0.048**	**0.090**	ND<0.009	**1.0**	**0.74**	ND<0.009	1.1	21	-	-
Dibenz(a,h)anthracene	**0.013**	**0.012**	ND<0.009	**0.019**	ND<0.01	**0.0094**	**0.019**	ND<0.009	**0.24**	**0.16**	ND<0.009	0.11	2.1	-	-
Benzo(g,h,i)perylene	**0.068**	**0.061**	ND<0.009	**0.087**	ND<0.01	**0.045**	**0.087**	ND<0.009	**0.84**	**0.62**	ND<0.009	-	-	-	-
Total Reported PAHs	**8.0**	**7.8**	ND	**1.71**	**0.031**	**0.67**	**0.88**	**0.0090**	**16.0**	**10.7**	**0.011**	-	-	-	-
PAH TEQ as Benzo(a)pyrene	**0.1**	**0.1**	**0.010**	**0.23**	**0.012**	**0.093**	**0.17**	**0.010**	**2.6**	**1.8**	**0.010**	-	-		0.58 (urban bkgd)
TOTAL METALS, EPA Method 6020 (mg/kg, dry)															
Total Arsenic	**8.4**	**6.9**	**4.1**	**3.1**	**8.6**	**6.0**	**2.7**	**6.4**	**5.4**	**4.0**	**6.9**	-	-	16	16
Total Barium	**130**	**140**	**110**	**65**	**140**	**43**	**21**	**140**	**82**	**56**	**140**	-	-	11,247	127,382
Total Cadmium	**0.56**	**0.52**	ND<0.5	**2.0**	ND<0.5	**65**	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	-	6.9	87
Total Chromium	**39**	**42**	**34**	**23**	**39**	**36**	**11**	**35**	**23**	**15**	**39**	-	-	40,223	360,223
Total Lead	**68**	**56**	**12**	**150**	**16**	**45**	**15**	**14**	**24**	**26**	**18**	-	-	400	800
Total Mercury	**0.11**	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	ND<0.1	-	-	3.1	3.1
Total Selenium	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	390	5,800	-	-
Total Silver	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	-	-	237	2,483
TPH (mg/kg, dry)															
TPH	**170**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	-	-	-	-

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Dashed Cell=no published value (VSS) or published value not applicable (RSL)

Brownfields Phase II Environmental Site Assessment
Pigeon Property
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Sample Identification	SB-1	SB-2S	SB-4S	SB-4D	SB-5	SB-6	SB-7	Dup SB-5	*EPA Residential*	*EPA Industrial*	*VSS Residential*
Sample Depth (ft. bg)	0-1.5	0-1.5	0-1.5	9-11	9-10	0-1.5	0-1.5	9-10	*RSL (mg/kg)*	*RSL (mg/kg)*	*(mg/kg)*
PID Reading (ppm)	0.2	193.0	1.8	39.4	2.7	1.3	0.3	2.7			
Sample Date	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20			
PCBs, EPA Method 8082 (mg/kg)											
Aroclor - 1016	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	4.1	27	NA
Aroclor - 1221	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.2	0.83	NA
Aroclor - 1232	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.17	0.72	NA
Aroclor - 1242	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.23	0.95	NA
Aroclor - 1248	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.23	0.94	NA
Aroclor - 1254	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	NA	0.97	0.12
Aroclor - 1260	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	0.24	0.99	NA
Aroclor - 1262	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	NA	NA	NA
Aroclor - 1268	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.02	NA	NA	NA
Total PCBs	ND	ND	ND	ND	ND	ND	ND	ND	-	-	0.114

Toxic Equivalency Calculations
Pigeon Property

LE Environmental

UST-1

Contaminant	Concentration (mg/kg)	Toxicity Equivalency Factor	Toxicity Equivalents to Benzo(a)pyrene
Benzo(a)anthracene	**0.041**	0.1	0.0041
Chrysene	**0.047**	0.001	0.000047
Benzo(b)fluoranthene	**0.087**	0.1	0.0087
Benzo(k)fluoranthene	**0.033**	0.01	0.00033
Benzo(a)pyrene	**0.067**	1	0.067
Indeno(1,2,3-cd)pyrene	**0.066**	0.1	0.0066
Dibenz(a,h)anthracene	**0.013**	1	0.013
		Total Benzo(a)pyrene Equivalent =	**0.100**

DUP UST-1

Contaminant	Concentration (mg/kg)	Toxicity Equivalency Factor	Toxicity Equivalents to Benzo(a)pyrene
Benzo(a)anthracene	**0.041**	0.1	0.0041
Chrysene	**0.046**	0.001	0.000046
Benzo(b)fluoranthene	**0.083**	0.1	0.0083
Benzo(k)fluoranthene	**0.031**	0.01	0.00031
Benzo(a)pyrene	**0.064**	1	0.064
Indeno(1,2,3-cd)pyrene	**0.059**	0.1	0.0059
Dibenz(a,h)anthracene	**0.012**	1	0.012
		Total Benzo(a)pyrene Equivalent =	**0.095**

SB-1

Contaminant	Concentration (mg/kg)	Toxicity Equivalency Factor	Toxicity Equivalents to Benzo(a)pyrene
Benzo(a)anthracene	ND<0.009	0.1	0.00045
Chrysene	ND<0.009	0.001	0.0000045
Benzo(b)fluoranthene	ND<0.009	0.1	0.00045
Benzo(k)fluoranthene	ND<0.009	0.01	0.000045
Benzo(a)pyrene	ND<0.009	1	0.0045
Indeno(1,2,3-cd)pyrene	ND<0.009	0.1	0.00045
Dibenz(a,h)anthracene	ND<0.009	1	0.0045
		Total Benzo(a)pyrene Equivalent =	**0.010**

SB-2S

Contaminant	Concentration (mg/kg)	Toxicity Equivalency Factor	Toxicity Equivalents to Benzo(a)pyrene
Benzo(a)anthracene	**0.15**	0.1	0.015
Chrysene	**0.16**	0.001	0.00016
Benzo(b)fluoranthene	**0.23**	0.1	0.023
Benzo(k)fluoranthene	**0.075**	0.01	0.00075
Benzo(a)pyrene	**0.16**	1	0.16
Indeno(1,2,3-cd)pyrene	**0.097**	0.1	0.0097
Dibenz(a,h)anthracene	**0.019**	1	0.019
		Total Benzo(a)pyrene Equivalent =	**0.228**

SB-2D

Contaminant	Concentration (mg/kg)	Toxicity Equivalency Factor	Toxicity Equivalents to Benzo(a)pyrene
Benzo(a)anthracene	ND<0.01	0.1	0.0005
Chrysene	ND<0.01	0.001	0.000005
Benzo(b)fluoranthene	ND<0.01	0.1	0.0005
Benzo(k)fluoranthene	ND<0.01	0.01	0.00005
Benzo(a)pyrene	ND<0.01	1	0.005
Indeno(1,2,3-cd)pyrene	ND<0.01	0.1	0.0005
Dibenz(a,h)anthracene	ND<0.01	1	0.005
		Total Benzo(a)pyrene Equivalent =	**0.012**

Toxic Equivalency Calculations
Pigeon Property

LE Environmental

SB-4S

Contaminant	Concentration (mg/kg)	Toxicity Equivalency Factor	Toxicity Equivalents to Benzo(a)pyrene
Benzo(a)anthracene	**0.052**	0.1	0.0052
Chrysene	**0.058**	0.001	0.000058
Benzo(b)fluoranthene	**0.084**	0.1	0.0084
Benzo(k)fluoranthene	**0.027**	0.01	0.00027
Benzo(a)pyrene	**0.065**	1	0.065
Indeno(1,2,3-cd)pyrene	**0.048**	0.1	0.0048
Dibenz(a,h)anthracene	**0.0094**	1	0.0094
		Total Benzo(a)pyrene Equivalent =	**0.093**

SB-4D

Contaminant	Concentration (mg/kg)	Toxicity Equivalency Factor	Toxicity Equivalents to Benzo(a)pyrene
Benzo(a)anthracene	**0.033**	0.1	0.0033
Chrysene	**0.039**	0.001	0.000039
Benzo(b)fluoranthene	**0.15**	0.1	0.015
Benzo(k)fluoranthene	**0.051**	0.01	0.00051
Benzo(a)pyrene	**0.12**	1	0.12
Indeno(1,2,3-cd)pyrene	**0.090**	0.1	0.009
Dibenz(a,h)anthracene	**0.019**	1	0.019
		Total Benzo(a)pyrene Equivalent =	**0.17**

SB-5

Contaminant	Concentration (mg/kg)	Toxicity Equivalency Factor	Toxicity Equivalents to Benzo(a)pyrene
Benzo(a)anthracene	ND<0.009	0.1	0.00045
Chrysene	ND<0.009	0.001	0.0000045
Benzo(b)fluoranthene	ND<0.009	0.1	0.00045
Benzo(k)fluoranthene	ND<0.009	0.01	0.000045
Benzo(a)pyrene	ND<0.009	1	0.0045
Indeno(1,2,3-cd)pyrene	ND<0.009	0.1	0.00045
Dibenz(a,h)anthracene	ND<0.009	1	0.0045
		Total Benzo(a)pyrene Equivalent =	**0.010**

SB-6

Contaminant	Concentration (mg/kg)	Toxicity Equivalency Factor	Toxicity Equivalents to Benzo(a)pyrene
Benzo(a)anthracene	**1.4**	0.1	0.14
Chrysene	**1.4**	0.001	0.0014
Benzo(b)fluoranthene	**2.2**	0.1	0.22
Benzo(k)fluoranthene	**0.76**	0.01	0.0076
Benzo(a)pyrene	**1.9**	1	1.9
Indeno(1,2,3-cd)pyrene	**1.0**	0.1	0.1
Dibenz(a,h)anthracene	**0.24**	1	0.24
		Total Benzo(a)pyrene Equivalent =	**2.6**

SB-7

Contaminant	Concentration (mg/kg)	Toxicity Equivalency Factor	Toxicity Equivalents to Benzo(a)pyrene
Benzo(a)anthracene	**0.97**	0.1	0.097
Chrysene	**1.0**	0.001	0.001
Benzo(b)fluoranthene	**1.5**	0.1	0.15
Benzo(k)fluoranthene	**0.56**	0.01	0.0056
Benzo(a)pyrene	**1.3**	1	1.3
Indeno(1,2,3-cd)pyrene	**0.74**	0.1	0.074
Dibenz(a,h)anthracene	**0.16**	1	0.16
		Total Benzo(a)pyrene Equivalent =	**1.8**

Dup SB-5

Contaminant	Concentration (mg/kg)	Toxicity Equivalency Factor	Toxicity Equivalents to Benzo(a)pyrene
Benzo(a)anthracene	ND<0.009	0.1	0.00045
Chrysene	ND<0.009	0.001	0.0000045
Benzo(b)fluoranthene	ND<0.009	0.1	0.00045
Benzo(k)fluoranthene	ND<0.009	0.01	0.000045
Benzo(a)pyrene	ND<0.009	1	0.0045
Indeno(1,2,3-cd)pyrene	ND<0.009	0.1	0.00045
Dibenz(a,h)anthracene	ND<0.009	1	0.0045
		Total Benzo(a)pyrene Equivalent =	**0.010**

Brownfields Phase II Environmental Site Assessment
Groundwater Sampling Data Summary
Pigeon Property
1705 Route 128, Westford, Vermont

Groundwater Sample	*MW-1*	*MW-2*	*MW-3*	*MW-4*	*MW-5*	*Duplicate*	I-Rule Groundwater Vapor Intrusion Standard-Resident (ug/l)	Vermont Groundwater Enforcement Standard (ug/l)
Depth to Groundwater (Ft)	*4.45*	*6.26*	*11.59*	*11.07*	*10.97*	*4.45*		
pH (standard units)	*6.27*	*6.41*	*6.69*	*6.78*	*7.01*	*6.27*		
Conductivity (umhos)	*7,460*	*520*	*103.9*	*1,006*	*228.00*	*7,460*		
Temperature (celcius)	*16.0*	*12.3*	*13.1*	*15.0*	*14.6*	*16.0*		
Turbidity (n.t.u.)	*138*	*173*	*113*	*910*	*NR*	*138*		
Sample Date	*6/17/20*	*6/17/20*	*6/17/20*	*6/17/20*	*6/17/20*	*6/17/20*		
VOCs, EPA Method 8260c (ug/l)								
Dichlorodifluoromethane	ND<200	ND<2	ND<2	ND<2	ND<2	ND<200	-	-
Chloromethane	ND<200	ND<2	ND<2	ND<2	ND<2	ND<200	-	-
Vinyl Chloride	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	0.13	2
Bromomethane	ND<200	ND<2	ND<2	ND<2	ND<2	ND<200	-	5
Chloroethane	ND<200	ND<2	ND<2	ND<2	ND<2	ND<200	31,000	
Trichlorofluoromethane	ND<200	ND<2	ND<2	ND<2	ND<2	ND<200	-	-
Diethyl Ether	ND<200	ND<2	ND<2	ND<2	ND<2	ND<200	-	-
Acetone	ND<1000	**12**	**19**	ND<10	**50**	ND<1000	-	950
1 ,1-Dichloroethene	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<50	-	7
Methylene chloride	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	680	5
Carbon disulfide	ND<200	ND<2	ND<2	ND<2	ND<2	ND<200	-	-
Methyl-t-butyl ether (MTBE)	**2,100**	ND<1	ND<1	**2.8**	ND<1	**2,100**	-	11
trans-1,2-Dichloroethene	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	100
1,1-Dichloroethane	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	270	70
2,2-Dichloropropane	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	-
cis-1,2-Dichloroethene	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	70
2-Butanone(MEK)	ND<1,000	ND<10	ND<10	ND<10	ND<10	ND<1,000	-	511
Bromochloromethane	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	8
Tetrahydrofuran(THF)	ND<1,000	ND<10	ND<10	ND<10	ND<10	ND<1,000	-	-
Chloroform	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	0.41	-
1,1,1-Trichloroethane	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	200
Carbon tetrachloride	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	0.24	5
1 ,1-Dichloropropene	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	-
Benzene	**14,000.**	**1.3**	ND<1	ND<1	**1.8**	**13,000.**	0.92	5
1,2-Dichloroethane	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	5
Trichloroethene (TCE)	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	0.82	5
1,2-Dichloropropane	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	5
Dibromomethane	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	-
Bromodichloromethane	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<50	-	-
4-Methyl-2-pentanone(MIBK)	ND<1,000	ND<10	ND<10	ND<10	ND<10	ND<1,000	-	-
cis-1,3-Dichloropropene	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<50	-	-
Toluene	**34,000**	**1.1**	ND<1	ND<1	**8.2**	**34,000**	-	1000
trans-1,3-Dichloropropene	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<50	-	-
1,1,2-Trichloroethane	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	5
2-Hexanone	ND<1,000	ND<10	ND<10	ND<10	ND<10	ND<1,000	-	-
Tetrachloroethene (PCE)	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	1.5	5
1,3-Dichloropropane	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	-

NOTES:
Groundwater Enforcement Standard from Vermont Groundwater Protection Rule 7/19
Groundwater Vapor Intrusion Standards from Vermont I-Rule 7/19
Reported results or reporting limits equal to or in excess of regulatory criteria are shaded.
Dashed Cell - no standard
NR = no reading due to meter capabilty

Brownfields Phase II Environmental Site Assessment
Groundwater Sampling Data Summary
Pigeon Property
1705 Route 128, Westford, Vermont

Groundwater Sample	*MW-1*	*MW-2*	*MW-3*	*MW-4*	*MW-5*	*Duplicate*	I-Rule Groundwater Vapor Intrusion Standard-Resident (ug/l)	Vermont Groundwater Enforcement Standard (ug/l)
Depth to Groundwater (Ft)	*4.45*	*6.26*	*11.59*	*11.07*	*10.97*	*4.45*		
pH (standard units)	*6.27*	*6.41*	*6.69*	*6.78*	*7.01*	*6.27*		
Conductivity (umhos)	*7,460*	*520*	*103.9*	*1,006*	*228.00*	*7,460*		
Temperature (celcius)	*16.0*	*12.3*	*13.1*	*15.0*	*14.6*	*16.0*		
Turbidity (n.t.u.)	*138*	*173*	*113*	*910*	*NR*	*138*		
Sample Date	*6/17/20*	*6/17/20*	*6/17/20*	*6/17/20*	*6/17/20*	*6/17/20*		
VOCs, EPA Method 8260c (ug/l)								
Dibromochloromethane	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	-
1,2-Dibromoethane(EDB)	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<50	-	0.05
Chlorobenzene	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	100
1,1,1,2-Tetrachloroethane	ND<100	ND<1	ND<2	ND<2	ND<1	ND<100	-	70
Ethylbenzene	**3,900**	**9.4**	ND<1	ND<1	**1.0**	**4,000**	2.2	700
mp-Xylene	**13,000**	**18**	ND<1	ND<1	**3.6**	**14,000**	-	10000**
o-Xylene	**6,000**	**2**	ND<1	ND<1	**1.3**	**6,300**	-	10000**
Styrene	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	100
Bromoform	ND<200	ND<2	ND<2	ND<2	ND<2	ND<200	-	-
IsoPropylbenzene	**120**	**1.5**	ND<1	ND<1	ND<1	**140**	-	-
Bromobenzene	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	-
1,1,2,2-Tetrachloroethane	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	-
1,2,3-Trichloropropane	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<50	-	0.02
n-Propylbenzene	**330**	**4.1**	ND<1	ND<1	ND<1	**380**	-	-
2-Chlorotoluene	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	-
4-Chlorotoluene	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	-
1,3,5-trimethylbenzene	**770**	**7.1**	ND<1	ND<1	ND<1	**890**	330	23*
tert-Butylbenzene	ND<100	**2.1**	ND<1	ND<1	ND<1	ND<100	-	-
1,2,4-trimethylbenzene	**2,900**	**22**	ND<1	ND<1	**1.4**	**3,200**	470	23*
sec-Butylbenzene	ND<100	**2.3**	ND<1	ND<1	ND<1	ND<100	-	-
1,3-Dichlorobenzene	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	600
p-Isopropyltoluene	ND<100	**1.1**	ND<1	ND<1	ND<1	ND<100	-	-
1,4-Dichlorobenzene	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	75
1,2-Dichlorobenzene	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	600
n-Butylbenzene	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	-
1,2-Dibromo-3-chloropropane	ND<20	ND<0.2	ND<0.2	ND<0.2	ND<0.2	ND<20	-	0.2
1,2,4-Trichlorobenzene	ND<100	ND<1	ND<1	ND<1	ND<1	ND<100	-	70
Hexachlorobutadiene	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<50	-	-
Naphthalene	**640**	**5.3**	ND<0.5	ND<0.5	**0.55**	**690**	4	0.5
1,2,3-Trichlorobenzene	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<50	-	0.9
Total Reported VOCs	**77,760**	**89**	**19**	**2.8**	**68**	**78,700**		

NOTES:
Groundwater Enforcement Standard from Vermont Groundwater Protection Rule 7/19
Groundwater Vapor Intrusion Standards from Vermont I-Rule 7/19
Reported results or reporting limits equal to or in excess of regulatory criteria are shaded.
Dashed Cell - no standard
* means total trimethylbenzenes ** means total xylenes
NR = no reading due to meter capabilty

Brownfields Phase II Environmental Site Assessment
Groundwater Sampling Data Summary
Pigeon Property
1705 Route 128, Westford, Vermont

Groundwater Sample	*MW-1*	*MW-2*	*MW-3*	*MW-4*	*MW-5*	*Duplicate*	I-Rule Groundwater Vapor Intrusion Standard-Resident (ug/l)	Vermont Groundwater Enforcement Standard (ug/l)
Depth to Groundwater (Ft)	*4.45*	*6.26*	*11.59*	*11.07*	*10.97*	*4.45*		
pH (standard units)	*6.27*	*6.41*	*6.69*	*6.78*	*7.01*	*6.27*		
Conductivity (umhos)	*7,460*	*520*	*103.9*	*1,006*	*228.00*	*7,460*		
Temperature (celcius)	*16.0*	*12.3*	*13.1*	*15.0*	*14.6*	*16.0*		
Turbidity (n.t.u.)	*138*	*173*	*113*	*910*	*NR*	*138*		
Sample Date	*6/17/20*	*6/17/20*	*6/17/20*	*6/17/20*	*6/17/20*	*6/17/20*		
RCRA Metals, EPA Method 6020a (mg/l)								
Total Arsenic	**0.017**	**0.0057**	Insufficient Water	**0.0031**	Insufficient Water	**0.017**	-	0.010
Total Barium	**1.6**	**0.71**		**0.46**		**1.6**	-	2
Total Cadmium	**0.0012**	**0.0019**		**0.0012**		**0.0012**	-	0.005
Total Chromium	**0.022**	ND<0.001		**0.0019**		**0.024**	-	0.100
Total Lead	**0.12**	**0.0011**		**0.0057**		**0.12**	-	0.015
Total Mercury	ND<0.0001	ND<0.0001		ND<0.0001		ND<0.0001	2.0	0.002
Total Selenium	**0.0047**	ND<0.001		ND<0.001		**0.0034**	-	0.05
Total Sliver	ND<0.001	ND<0.001		ND<0.001		ND<0.001	-	-

NOTES:
Groundwater Enforcement Standard from Vermont Groundwater Protection Rule 7/19
Groundwater Vapor Intrusion Standards from Vermont I-Rule 7/19
Reported results or reporting limits equal to or in excess of regulatory criteria are shaded.
Dashed Cell - no standard

Brownfields Phase II Environmental Site Assessment
Drinking Water Sampling Data Summary
Pigeon Property
1705 Route 128, Westford, Vermont

Sample *Sample Date*	*DWS-1* *6/17/20*	*MCL*
VOCs, EPA Method 524.2 (ug/L)		
Dichlorodifluoromethane	ND<0.5	-
Chloromethane	ND<0.5	-
Vinyl Chloride	ND<0.5	2.
Bromomethane	ND<0.5	-
Chloroethane	ND<0.5	-
Trichlorofluoromethane	ND<0.5	-
Diethyl Ether	ND<5	-
Acetone	ND<10	-
1 ,1-Dichloroethene	ND<0.5	7
tert-Butyl Alcohol (TBA)	ND<30	
Methylene chloride	ND<0.5	5
Carbon disulfide	ND<2	-
MTBE	ND<0.5	-
trans-1,2-Dichloroethene	ND<0.5	100
1,1-Dichloroethane	ND<0.5	-
2,2-Dichloropropane	ND<0.5	-
cis-1,2-Dichloroethene	ND<0.5	70
2-Butanone(MEK)	ND<5	-
Bromochloromethane	ND<0.5	-
Tetrahydrofuran(THF)	ND<5	-
Chloroform	ND<0.5	80*
1,1,1-Trichloroethane	ND<0.5	200
Carbon tetrachloride	ND<0.5	5
1 ,1-Dichloropropene	ND<0.5	-
Benzene	ND<0.5	5
1,2-Dichloroethane	ND<0.5	5
Trichloroethene (TCE)	ND<0.5	5
1,2-Dichloropropane	ND<0.5	5
Dibromomethane	ND<0.5	-
Bromodichloromethane	ND<0.5	80*
4-Methyl-2-pentanone(MIBK)	ND<5	-
cis-1,3-Dichloropropene	ND<0.3	-
Toluene	ND<0.5	1000
trans-1,3-Dichloropropene	ND<0.3	-
1,1,2-Trichloroethane	ND<0.5	5
2-Hexanone	ND<5	-
Tetrachloroethene (PCE)	ND<0.05	5
1,3-Dichloropropane	ND<0.05	-
Dibromochloromethane	ND<0.05	80*

NOTES:
Drinking Water Standards - Maximum Contaminant Levels (MCLs) published in the Water Supply Rule, 3/2020
ND<xx = Not Detected< Detection Limit; Results reported above detection limits are indicated in bold
Reporting limits and reported concentrations equal to or above the MCL are shaded
* means the indicated enforcement standard is for total trihalomethanes
*** means the indicated enforcement standard is for total xylenes

Brownfields Phase II Environmental Site Assessment
Drinking Water Sampling Data Summary
Pigeon Property
1705 Route 128, Westford, Vermont

Sample *Sample Date*	*DWS-1* *6/17/20*	*MCL*
VOCs, EPA Method 524.2 (ug/L) (continued)		
1,2-Dibromoethane(EDB)	ND<0.05	0.05
Chlorobenzene	ND<0.05	100
1,1,1,2-Tetrachloroethane	ND<0.5	-
Ethylbenzene	ND<0.5	700
mp-Xylene	ND<0.5	10000***
o-Xylene	ND<0.5	10000***
Styrene	ND<0.5	100
Bromoform	ND<0.5	80*
IsoPropylbenzene	ND<0.5	-
Bromobenzene	ND<0.5	-
1,1,2,2-Tetrachloroethane	ND<0.5	-
1,2,3-Trichloropropane	ND<0.5	-
n-Propylbenzene	ND<0.5	-
2-Chlorotoluene	ND<0.5	-
4-Chlorotoluene	ND<0.5	-
1,3,5-trimethylbenzene	ND<0.5	-
tert-Butylbenzene	ND<0.5	-
1,2,4-trimethylbenzene	ND<0.5	-
sec-Butylbenzene	ND<0.5	-
1,3-Dichlorobenzene	ND<0.5	-
p-Isopropyltoluene	ND<0.5	-
1,4-Dichlorobenzene	ND<0.5	75
1,2-Dichlorobenzene	ND<0.5	600.
n-Butylbenzene	ND<0.5	-
1,2-Dibromo-3-chloropropane	ND<0.5	0.2
1,2,4-Trichlorobenzene	ND<0.5	70
Hexachlorobutadiene	ND<0.5	-
Naphthalene	ND<0.5	-
1,2,3-Trichlorobenzene	ND<0.5	-
Total Reported VOCs	ND	-

NOTES:
Drinking Water Standards - Maximum Contaminant Levels (MCLs) published in the Water Supply Rule, 3/2020
ND<xx = Not Detected< Detection Limit; Results reported above detection limits are indicated in bold
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* means the indicated enforcement standard is for total trihalomethanes
*** means the indicated enforcement standard is for total xylenes

*****Read the directions, in their entirety, on the 'Directions' Tab before use.*****

sample information

Site Number:	2019-4863
Site Name:	Pigeon Property
Sample Number:	SB-1
Sample Depth:	0-18"
Sample Date:	6/5/20

1. Select chemicals from dropdown list

2. Input reported concentrations in mg/kg

3. View autocalculated ILCR and HQ associated with each individual chemical reported

Analyte	CASRN	[a]RB-RSV$_{ca}$ (mg/kg)	[b]RB-RSV$_{nc}$ (mg/kg)	Sample Concentration (mg/kg)	Calculated Sample ILCR (unitless)	Calculated Sample HQ (unitless)
2,3,7,8-TCDD TEQ[c]	1746-01-6*	2.25E-06	4.91E-05		Analyte conc. < RL	Analyte conc. < RL
BaP-TE[d]	--	7.28E-02	NA	1.00E-02	1.37E-07	No noncancer RB-RSV
Benzo(a)pyrene[e]	50-32-8	NA	1.72E+01		Included in BaP-TE	Analyte conc. < RL
Total PCBs[f]	1336-36-3	1.14E-01	1.13E+00		Analyte conc. < RL	Analyte conc. < RL
Acetochlor	34256-82-1	NA	1.22E+03		No cancer RB-RSV	Analyte conc. < RL
Acetone	67-64-1	NA	4.06E+04		No cancer RB-RSV	Analyte conc. < RL
Alachlor	15972-60-8	NA	6.08E+01		No cancer RB-RSV	Analyte conc. < RL
Aldrin	309-00-2	2.02E-02	2.10E+00		Analyte conc. < RL	Analyte conc. < RL
Aluminum	7429-90-5	NA	7.25E+04		No cancer RB-RSV	Analyte conc. < RL
Antimony	7440-36-0	NA	2.60E+01		No cancer RB-RSV	Analyte conc. < RL
Barium	7440-39-3	NA	1.12E+04	1.10E+02	No cancer RB-RSV	9.78E-03
Benomyl	17804-35-2	1.16E+02	7.90E+02		Analyte conc. < RL	Analyte conc. < RL
Benzene	71-43-2	6.98E-01	1.11E+02		Analyte conc. < RL	Analyte conc. < RL
Beryllium	7440-41-7	5.67E+02	3.45E+01		Analyte conc. < RL	Analyte conc. < RL
Bis(2-chloro-1-methyl ethyl)ether	108-60-1	NA	2.83E+03		No cancer RB-RSV	Analyte conc. < RL
Boron	7440-42-8	NA	1.47E+04		No cancer RB-RSV	Analyte conc. < RL
Bromate	15541-45-4	5.36E-01	2.93E+02		Analyte conc. < RL	Analyte conc. < RL
Bromochloromethane	74-97-5	NA	1.93E+02		No cancer RB-RSV	Analyte conc. < RL
Bromoxynil	1689-84-5	2.69E+00	9.12E+02		Analyte conc. < RL	Analyte conc. < RL
Butylbenzene, n-	104-51-8	NA	3.50E+03		No cancer RB-RSV	Analyte conc. < RL
Butylbenzene, sec-	135-98-8	NA	7.01E+03		No cancer RB-RSV	Analyte conc. < RL
Butylbenzene, tert-	98-06-6	NA	7.01E+03		No cancer RB-RSV	Analyte conc. < RL
Cadmium (food)	7440-43-9	7.56E+02	6.86E+00		Analyte conc. < RL	Analyte conc. < RL
Carbaryl	63-25-2	3.17E+02	6.08E+03		Analyte conc. < RL	Analyte conc. < RL
Carbon Disulfide	75-15-0	NA	6.08E+02		No cancer RB-RSV	Analyte conc. < RL
Carbon tetrachloride	56-23-5	3.72E-01	1.30E+02		Analyte conc. < RL	Analyte conc. < RL
Chlorobenzene	108-90-7	NA	4.14E+02		No cancer RB-RSV	Analyte conc. < RL
Chromium (III) (insoluble salts)	16065-83-1	NA	4.02E+04	3.40E+01	No cancer RB-RSV	8.45E-04
Chromium (VI)	18540-29-9	9.05E-02	1.16E+02		Analyte conc. < RL	Analyte conc. < RL
Cobalt	7440-48-4	1.51E+02	2.19E+01		Analyte conc. < RL	Analyte conc. < RL
Copper	7440-50-8	NA	1.04E+04		No cancer RB-RSV	Analyte conc. < RL
Di (2-ethylhexyl) phthalate	117-81-7	1.98E+01	1.22E+03		Analyte conc. < RL	Analyte conc. < RL
Dibromochloropropane	96-12-8	6.00E-03	6.63E+00		Analyte conc. < RL	Analyte conc. < RL
Dibromoethane, 1,2-	106-93-4	2.27E-02	1.15E+02		Analyte conc. < RL	Analyte conc. < RL
Dichloroethane, 1,1-	75-34-3	2.10E+00	1.40E+04		Analyte conc. < RL	Analyte conc. < RL
Dichloroethane, 1,2-	107-06-2	2.85E-01	4.95E+01		Analyte conc. < RL	Analyte conc. < RL
Dichloroethylene, cis 1,2-	156-59-2	NA	1.40E+02		No cancer RB-RSV	Analyte conc. < RL
Dichloroethylene, trans 1,2-	156-60-5	NA	1.40E+03		No cancer RB-RSV	Analyte conc. < RL
Dichloropropane, 1,2-	78-87-5	1.51E+00	2.63E+01		Analyte conc. < RL	Analyte conc. < RL
Dioxane, 1,4-	123-91-1	2.78E+00	1.05E+03		Analyte conc. < RL	Analyte conc. < RL
Ethylbenzene	100-41-4	3.68E+00	4.45E+02		Analyte conc. < RL	Analyte conc. < RL
Fluoranthene	206-44-0	NA	2.30E+03		No cancer RB-RSV	Analyte conc. < RL
Fluorene	86-73-7	NA	2.30E+03		No cancer RB-RSV	Analyte conc. < RL
Hexachlorobenzene	118-74-1	1.31E-01	5.61E+01		Analyte conc. < RL	Analyte conc. < RL
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	4.60E+00	2.90E+02		Analyte conc. < RL	Analyte conc. < RL
Hydrogen cyanide	74-90-8	NA	4.91E+01		No cancer RB-RSV	Analyte conc. < RL
Iron	7439-89-6	NA	5.13E+04		No cancer RB-RSV	Analyte conc. < RL
Isopropylbenzene (cumene)	98-82-8	NA	2.56E+02		No cancer RB-RSV	Analyte conc. < RL
Manganese (non-diet)	7439-96-5	NA	1.12E+03		No cancer RB-RSV	Analyte conc. < RL
Mercury (elemental)	7439-97-6	NA	3.13E+00		No cancer RB-RSV	Analyte conc. < RL
Methyl ethyl ketone	78-93-3	NA	1.70E+04		No cancer RB-RSV	Analyte conc. < RL
Methyl tert-butyl ether (MTBE)	1634-04-4	NA	6.49E+02		No cancer RB-RSV	Analyte conc. < RL
Molybdenum	7439-98-7	NA	3.66E+02		No cancer RB-RSV	Analyte conc. < RL
Naphthalene	91-20-3	2.72E+00	2.24E+02		Analyte conc. < RL	Analyte conc. < RL
Nickel	7440-02-0	5.23E+03	9.40E+02		Analyte conc. < RL	Analyte conc. < RL
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	2691-41-0	NA	3.70E+03		No cancer RB-RSV	Analyte conc. < RL
Pentachlorophenol	87-86-5	4.84E-01	2.37E+02		Analyte conc. < RL	Analyte conc. < RL
Pentaerythritol tetranitrate (PETN)	78-11-5	NA	1.22E+02		No cancer RB-RSV	Analyte conc. < RL
Perchlorate	14797-73-0	NA	5.13E+01		No cancer RB-RSV	Analyte conc. < RL
Perfluoroheptanoic acid (PFHpA)	375-85-9	NA	1.22E+00		No cancer RB-RSV	Analyte conc. < RL
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	NA	1.22E+00		No cancer RB-RSV	Analyte conc. < RL
Perfluorononanoic acid (PFNA)	375-95-1	NA	1.22E+00		No cancer RB-RSV	Analyte conc. < RL
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	NA	1.22E+00		No cancer RB-RSV	Analyte conc. < RL
Perfluorooctanoic acid (PFOA)	335-67-1	3.96E+00	1.22E+00		Analyte conc. < RL	Analyte conc. < RL
Propoxur (Baygon)	114-26-1	7.88E+01	2.43E+02		Analyte conc. < RL	Analyte conc. < RL
Propyl benzene, n-	103-65-1	NA	2.53E+02		No cancer RB-RSV	Analyte conc. < RL
Selenium	7782-49-2	NA	3.66E+02		No cancer RB-RSV	Analyte conc. < RL
Silver	7440-22-4	NA	2.37E+02		No cancer RB-RSV	Analyte conc. < RL
Tetrachloroethane, 1,1,1,2-	630-20-6	1.32E+00	2.10E+03		Analyte conc. < RL	Analyte conc. < RL
Tetrachloroethylene	127-18-4	2.38E+00	1.13E+02		Analyte conc. < RL	Analyte conc. < RL
Thallium (soluble Thallium)	7440-28-0**	NA	7.33E-01		No cancer RB-RSV	Analyte conc. < RL
Toluene	108-88-3	NA	7.06E+02		No cancer RB-RSV	Analyte conc. < RL
Trichloroethylene	79-01-6	6.81E-01	6.21E+00		Analyte conc. < RL	Analyte conc. < RL
Trichloropropane, 1,2,3-	96-18-4	3.11E-03	8.67E+00		Analyte conc. < RL	Analyte conc. < RL
Trimethylbenzene, 1,2,3-	526-73-8	NA	2.06E+02		No cancer RB-RSV	Analyte conc. < RL
Trimethylbenzene, 1,2,4-	95-63-6	NA	1.66E+02		No cancer RB-RSV	Analyte conc. < RL
Trimethylbenzene, 1,3,5-	108-67-8	NA	1.44E+02		No cancer RB-RSV	Analyte conc. < RL
Trinitrotoluene, 2,4,6- (TNT)	118-96-7	1.15E+01	3.49E+01		Analyte conc. < RL	Analyte conc. < RL
Uranium (soluble salts)	NA	NA	4.40E+01		No cancer RB-RSV	Analyte conc. < RL
Vanadium	7440-62-2	NA	2.77E+00		No cancer RB-RSV	Analyte conc. < RL
Vinyl chloride	75-01-4	9.83E-02	8.51E+01		Analyte conc. < RL	Analyte conc. < RL
Xylenes	1330-20-7	NA	2.52E+02		No cancer RB-RSV	Analyte conc. < RL
Zinc	7440-66-6	NA	2.20E+04		No cancer RB-RSV	Analyte conc. < RL
					Sample Cumulative ILCR:	**Sample HI:**
					1.37E-07	1.06E-02

a. RB-RSV$_{ca}$ corresponds to a one-in-one million ILCR. See IRULE Appendix E, Table 1.

b. RB-RSV$_{nc}$ corresponds to a HQ of 1 based on Hypothetical Young Child Resident scenario. See IRULE Appendix E, Table 1.

Notes:
HI = Hazard Index (sum of Hazard Quotients)
HQ = Hazard Quotient
ILCR = Incremental Lifetime Cancer Risk
NA = Not Available
RB-RSV$_{ca}$ = Risk-Based Residential Soil Value based on cancer
RB-RSV$_{nc}$ = Risk-Based Residential Soil Value based on noncancer endpoint
* - CAS Number for 2,3,7,8-TCDD
** - CAS Number is for Metallic Thallium

c. The 2,3,7,8-TCDD TEQ row should include the sum of the concentrations of all dioxins, furans, and dioxin-like PCBs reported as 2,3,7,8-TCDD toxic eqivalents.

d. The BaP-TE row should include the sum of the concentrations for all carcinogenic PAHs (including benzo(a)pyrene) reported as Benzo(a)pyrene toxic equivalents. See direction 6 for designated urban background locations.

e. Benzo(a)pyrene row should include only the concentration of benzo(a)pyrene in order to address its noncancer hazards.

f. The Total PCBs row should include the sum of the concentrations for all PCBs except dioxin-like PCBs. Dioxin-like PCBs should be included in the 2,3,7,8-TCDD TE concentration entry.

Version 09/12/19

*****Read the directions, in their entirety, on the 'Directions' Tab before use.*****

sample information

Site Number:	2019-4863
Site Name:	Pigeon Property
Sample Number:	SB-4S
Sample Depth:	0-18"
Sample Date:	6/5/20

1. Select chemicals from dropdown list

2. Input reported concentrations in mg/kg

3. View autocalculated ILCR and HQ associated with each individual chemical reported

Analyte	CASRN	[a]RB-RSV$_{ca}$ (mg/kg)	[b]RB-RSV$_{nc}$ (mg/kg)	Sample Concentration (mg/kg)	Calculated Sample ILCR (unitless)	Calculated Sample HQ (unitless)
2,3,7,8-TCDD TEQ[c]	1746-01-6*	2.25E-06	4.91E-05		Analyte conc. < RL	Analyte conc. < RL
BaP-TE[d]	--	7.28E-02	NA	9.30E-02	1.28E-06	No noncancer RB-RSV
Benzo(a)pyrene[e]	50-32-8	NA	1.72E+01	6.50E-02	Included in BaP-TE	3.79E-03
Total PCBs[f]	1336-36-3	1.14E-01	1.13E+00		Analyte conc. < RL	Analyte conc. < RL
Acetochlor	34256-82-1	NA	1.22E+03		No cancer RB-RSV	Analyte conc. < RL
Acetone	67-64-1	NA	4.06E+04		No cancer RB-RSV	Analyte conc. < RL
Alachlor	15972-60-8	NA	6.08E+01		No cancer RB-RSV	Analyte conc. < RL
Aldrin	309-00-2	2.02E-02	2.10E+00		Analyte conc. < RL	Analyte conc. < RL
Aluminum	7429-90-5	NA	7.25E+04		No cancer RB-RSV	Analyte conc. < RL
Antimony	7440-36-0	NA	2.60E+01		No cancer RB-RSV	Analyte conc. < RL
Barium	7440-39-3	NA	1.12E+04	4.30E+01	No cancer RB-RSV	3.82E-03
Benomyl	17804-35-2	1.16E+02	7.90E+02		Analyte conc. < RL	Analyte conc. < RL
Benzene	71-43-2	6.98E-01	1.11E+02		Analyte conc. < RL	Analyte conc. < RL
Beryllium	7440-41-7	5.67E+02	3.45E+01		Analyte conc. < RL	Analyte conc. < RL
Bis(2-chloro-1-methyl ethyl)ether	108-60-1	NA	2.83E+03		No cancer RB-RSV	Analyte conc. < RL
Boron	7440-42-8	NA	1.47E+04		No cancer RB-RSV	Analyte conc. < RL
Bromate	15541-45-4	5.36E-01	2.93E+02		Analyte conc. < RL	Analyte conc. < RL
Bromochloromethane	74-97-5	NA	1.93E+02		No cancer RB-RSV	Analyte conc. < RL
Bromoxynil	1689-84-5	2.69E+00	9.12E+02		Analyte conc. < RL	Analyte conc. < RL
Butylbenzene, n-	104-51-8	NA	3.50E+03		No cancer RB-RSV	Analyte conc. < RL
Butylbenzene, sec-	135-98-8	NA	7.01E+03		No cancer RB-RSV	Analyte conc. < RL
Butylbenzene, tert-	98-06-6	NA	7.01E+03		No cancer RB-RSV	Analyte conc. < RL
Cadmium (food)	7440-43-9	7.56E+02	6.86E+00	6.50E+01	8.60E-08	9.48E+00
Carbaryl	63-25-2	3.17E+02	6.08E+03		Analyte conc. < RL	Analyte conc. < RL
Carbon Disulfide	75-15-0	NA	6.08E+02		No cancer RB-RSV	Analyte conc. < RL
Carbon tetrachloride	56-23-5	3.72E-01	1.30E+02		Analyte conc. < RL	Analyte conc. < RL
Chlorobenzene	108-90-7	NA	4.14E+02		No cancer RB-RSV	Analyte conc. < RL
Chromium (III) (insoluble salts)	16065-83-1	NA	4.02E+04	3.60E+01	No cancer RB-RSV	8.95E-04
Chromium (VI)	18540-29-9	9.06E-02	1.16E+02		Analyte conc. < RL	Analyte conc. < RL
Cobalt	7440-48-4	1.51E+02	2.19E+01		Analyte conc. < RL	Analyte conc. < RL
Copper	7440-50-8	NA	1.04E+04		No cancer RB-RSV	Analyte conc. < RL
Di (2-ethylhexyl) phthalate	117-81-7	1.98E+01	1.22E+03		Analyte conc. < RL	Analyte conc. < RL
Dibromochloropropane	96-12-8	6.00E-03	6.63E+00		Analyte conc. < RL	Analyte conc. < RL
Dibromoethane, 1,2-	106-93-4	2.27E-02	1.15E+02		Analyte conc. < RL	Analyte conc. < RL
Dichloroethane, 1,1-	75-34-3	2.10E+00	1.40E+04		Analyte conc. < RL	Analyte conc. < RL
Dichloroethane, 1,2-	107-06-2	2.85E-01	4.95E+01		Analyte conc. < RL	Analyte conc. < RL
Dichloroethylene, cis 1,2-	156-59-2	NA	1.40E+02		No cancer RB-RSV	Analyte conc. < RL
Dichloroethylene, trans 1,2-	156-60-5	NA	1.40E+03		No cancer RB-RSV	Analyte conc. < RL
Dichloropropane, 1,2-	78-87-5	1.51E+00	2.63E+01		Analyte conc. < RL	Analyte conc. < RL
Dioxane, 1,4-	123-91-1	2.78E+00	1.05E+03		Analyte conc. < RL	Analyte conc. < RL
Ethylbenzene	100-41-4	3.68E+00	4.45E+02		Analyte conc. < RL	Analyte conc. < RL
Fluoranthene	206-44-0	NA	2.30E+03	1.00E-01	No cancer RB-RSV	4.35E-05
Fluorene	86-73-7	NA	2.30E+03		No cancer RB-RSV	Analyte conc. < RL
Hexachlorobenzene	118-74-1	1.31E-01	5.61E+01		Analyte conc. < RL	Analyte conc. < RL
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	4.60E+00	2.90E+02		Analyte conc. < RL	Analyte conc. < RL
Hydrogen cyanide	74-90-8	NA	4.91E+01		No cancer RB-RSV	Analyte conc. < RL
Iron	7439-89-6	NA	5.13E+04		No cancer RB-RSV	Analyte conc. < RL
Isopropylbenzene (cumene)	98-82-8	NA	2.56E+02		No cancer RB-RSV	Analyte conc. < RL
Manganese (non-diet)	7439-96-5	NA	1.12E+03		No cancer RB-RSV	Analyte conc. < RL
Mercury (elemental)	7439-97-6	NA	3.13E+00		No cancer RB-RSV	Analyte conc. < RL
Methyl ethyl ketone	78-93-3	NA	1.70E+04		No cancer RB-RSV	Analyte conc. < RL
Methyl tert-butyl ether (MTBE)	1634-04-4	NA	6.49E+02		No cancer RB-RSV	Analyte conc. < RL
Molybdenum	7439-98-7	NA	3.66E+02		No cancer RB-RSV	Analyte conc. < RL
Naphthalene	91-20-3	2.72E+00	2.24E+02		Analyte conc. < RL	Analyte conc. < RL
Nickel	7440-02-0	5.23E+03	9.40E+02		Analyte conc. < RL	Analyte conc. < RL
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	2691-41-0	NA	3.70E+03		No cancer RB-RSV	Analyte conc. < RL
Pentachlorophenol	87-86-5	4.84E-01	2.37E+02		Analyte conc. < RL	Analyte conc. < RL
Pentaerythritol tetranitrate (PETN)	78-11-5	NA	1.22E+02		No cancer RB-RSV	Analyte conc. < RL
Perchlorate	14797-73-0	NA	5.13E+01		No cancer RB-RSV	Analyte conc. < RL
Perfluoroheptanoic acid (PFHpA)	375-85-9	NA	1.22E+00		No cancer RB-RSV	Analyte conc. < RL
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	NA	1.22E+00		No cancer RB-RSV	Analyte conc. < RL
Perfluorononanoic acid (PFNA)	375-95-1	NA	1.22E+00		No cancer RB-RSV	Analyte conc. < RL
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	NA	1.22E+00		No cancer RB-RSV	Analyte conc. < RL
Perfluorooctanoic acid (PFOA)	335-67-1	3.96E+00	1.22E+00		Analyte conc. < RL	Analyte conc. < RL
Propoxur (Baygon)	114-26-1	7.88E+01	2.43E+02		Analyte conc. < RL	Analyte conc. < RL
Propyl benzene, n-	103-65-1	NA	2.53E+02		No cancer RB-RSV	Analyte conc. < RL
Selenium	7782-49-2	NA	3.66E+02		No cancer RB-RSV	Analyte conc. < RL
Silver	7440-22-4	NA	2.37E+02		No cancer RB-RSV	Analyte conc. < RL
Tetrachloroethane, 1,1,1,2-	630-20-6	1.32E+00	2.10E+03		Analyte conc. < RL	Analyte conc. < RL
Tetrachloroethylene	127-18-4	2.38E+00	1.13E+02		Analyte conc. < RL	Analyte conc. < RL
Thallium (soluble Thallium)	7440-28-0**	NA	7.33E-01		No cancer RB-RSV	Analyte conc. < RL
Toluene	108-88-3	NA	7.06E+02		No cancer RB-RSV	Analyte conc. < RL
Trichloroethylene	79-01-6	6.81E-01	6.21E+00		Analyte conc. < RL	Analyte conc. < RL
Trichloropropane, 1,2,3-	96-18-4	3.11E-03	8.67E+00		Analyte conc. < RL	Analyte conc. < RL
Trimethylbenzene, 1,2,3-	526-73-8	NA	2.06E+02		No cancer RB-RSV	Analyte conc. < RL
Trimethylbenzene, 1,2,4-	95-63-6	NA	1.66E+02		No cancer RB-RSV	Analyte conc. < RL
Trimethylbenzene, 1,3,5-	108-67-8	NA	1.44E+02		No cancer RB-RSV	Analyte conc. < RL
Trinitrotoluene, 2,4,6- (TNT)	118-96-7	1.15E+01	3.49E+01		Analyte conc. < RL	Analyte conc. < RL
Uranium (soluble salts)	NA	NA	4.40E+01		No cancer RB-RSV	Analyte conc. < RL
Vanadium	7440-62-2	NA	2.77E+00		No cancer RB-RSV	Analyte conc. < RL
Vinyl chloride	75-01-4	9.83E-02	8.51E+01		Analyte conc. < RL	Analyte conc. < RL
Xylenes	1330-20-7	NA	2.52E+02		No cancer RB-RSV	Analyte conc. < RL
Zinc	7440-66-6	NA	2.20E+04		No cancer RB-RSV	Analyte conc. < RL
					Sample Cumulative ILCR:	**Sample HI:**
					1.36E-06	9.49E+00

a. RB-RSV$_{ca}$ corresponds to a one-in-one million ILCR. See IRULE Appendix E, Table 1.

b. RB-RSV$_{nc}$ corresponds to a HQ of 1 based on Hypothetical Young Child Resident scenario. See IRULE Appendix E, Table 1.

Notes:
HI = Hazard Index (sum of Hazard Quotients)
HQ = Hazard Quotient
ILCR = Incremental Lifetime Cancer Risk
NA = Not Available
RB-RSV$_{ca}$ = Risk-Based Residential Soil Value based on cancer
RB-RSV$_{nc}$ = Risk-Based Residential Soil Value based on noncancer endpoint
* - CAS Number for 2,3,7,8-TCDD
** - CAS Number is for Metallic Thallium

c. The 2,3,7,8-TCDD TEQ row should include the sum of the concentrations of all dioxins, furans, and dioxin-like PCBs reported as 2,3,7,8-TCDD toxic eqivalents.

d. The BaP-TE row should include the sum of the concentrations for all carcinogenic PAHs (including benzo(a)pyrene) reported as Benzo(a)pyrene toxic equivalents. See direction 6 for designated urban background locations.

e. Benzo(a)pyrene row should include only the concentration of benzo(a)pyrene in order to address its noncancer hazards.

f. The Total PCBs row should include the sum of the concentrations for all PCBs except dioxin-like PCBs. Dioxin-like PCBs should be included in the 2,3,7,8-TCDD TE concentration entry.

Version 09/12/19

Eastern Analytical, Inc.
professional laboratory and drilling services

Angela Emerson
LE Environmental LLC
21 North Main Street #1
Waterbury , VT 05676

Subject: Laboratory Report

Eastern Analytical, Inc. ID: 211268
Client Identification: 1705 Route 128 | 19-138
Date Received: 6/5/2020

Dear Ms. Emerson :

Enclosed please find the laboratory report for the above identified project. All analyses were performed in accordance with our QA/QC Program. Unless otherwise stated, holding times, preservation techniques, container types, and sample conditions adhered to EPA Protocol. Samples which were collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures. Eastern Analytical, Inc. certifies that the enclosed test results meet all requirements of NELAP and other applicable state certifications. Please refer to our website at www.easternanalytical.com for a copy of our NELAP certificate and accredited parameters.

The following standard abbreviations and conventions apply to all EAI reports:
Solid samples are reported on a dry weight basis, unless otherwise noted
< : "less than" followed by the reporting limit
> : "greater than" followed by the reporting limit
%R : % Recovery

Eastern Analytical Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012) and New York (12072).

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the the written approval of the laboratory.

If you have any questions regarding the results contained within, please feel free to directly contact me or the chemist(s) who performed the testing in question. Unless otherwise requested, we will dispose of the sample (s) 30 days from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw, Lab Director | 6.12.20 Date | 17 # of pages (excluding cover letter)

SAMPLE CONDITIONS PAGE

EAI ID#: **211268**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Temperature upon receipt (°C): 2.6 **Received on ice or cold packs (Yes/No): Y**

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date Received	Date Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
211268.01	UST-1	6/5/20	6/2/20	soil	73.2	Adheres to Sample Acceptance Policy
211268.02	Duplicate	6/5/20	6/2/20	soil	74.8	Adheres to Sample Acceptance Policy
211268.03	Trip Blank	6/5/20	6/2/20	soil	100.0	Adheres to Sample Acceptance Policy

Samples were properly preserved and the pH measured when applicable unless otherwise noted. Analysis of solids for pH, Flashpoint, Ignitability, Paint Filter, Corrosivity, Conductivity and Specific Gravity are reported on an "as received" basis.
Immediate analyses, pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite, performed at the laboratory were run outside of the recommended 15 minute hold time.
All results contained in this report relate only to the above listed samples.
References include:
1) EPA 600/4-79-020, 1983
2) Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd Edition or noted Revision year.
3) Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
4) Hach Water Analysis Handbook, 4th edition, 1992

LABORATORY REPORT

EAI ID#: **211268**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Sample ID:	UST-1	Duplicate	Trip Blank
Lab Sample ID:	211268.01	211268.02	211268.03
Matrix:	soil	soil	soil
Date Sampled:	6/2/20	6/2/20	6/2/20
Date Received:	6/5/20	6/5/20	6/5/20
Units:	mg/kg	mg/kg	mg/kg
Date of Analysis:	6/9/20	6/9/20	6/10/20
Analyst:	JAK	JAK	JAK
Method:	8260C	8260C	8260C
Dilution Factor:	1	1	1
Dichlorodifluoromethane	< 0.1	< 0.1	< 0.1
Chloromethane	< 0.1	< 0.1	< 0.1
Vinyl chloride	< 0.03	< 0.02	< 0.02
Bromomethane	< 0.1	< 0.1	< 0.1
Chloroethane	< 0.1	< 0.1	< 0.1
Trichlorofluoromethane	< 0.1	< 0.1	< 0.1
Diethyl Ether	< 0.06	< 0.06	< 0.05
Acetone	< 3	< 2	< 2
1,1-Dichloroethene	< 0.06	< 0.06	< 0.05
Methylene chloride	< 0.1	< 0.1	< 0.1
Carbon disulfide	< 0.1	< 0.1	< 0.1
Methyl-t-butyl ether(MTBE)	< 0.1	< 0.1	< 0.1
trans-1,2-Dichloroethene	< 0.06	< 0.06	< 0.05
1,1-Dichloroethane	< 0.06	< 0.06	< 0.05
2,2-Dichloropropane	< 0.06	< 0.06	< 0.05
cis-1,2-Dichloroethene	< 0.06	< 0.06	< 0.05
2-Butanone(MEK)	< 0.6	< 0.6	< 0.5
Bromochloromethane	< 0.06	< 0.06	< 0.05
Tetrahydrofuran(THF)	< 0.6	< 0.6	< 0.5
Chloroform	< 0.06	< 0.06	< 0.05
1,1,1-Trichloroethane	< 0.06	< 0.06	< 0.05
Carbon tetrachloride	< 0.06	< 0.06	< 0.05
1,1-Dichloropropene	< 0.06	< 0.06	< 0.05
Benzene	**43**	**32**	< 0.05
1,2-Dichloroethane	< 0.06	< 0.06	< 0.05
Trichloroethene	< 0.06	< 0.06	< 0.05
1,2-Dichloropropane	< 0.06	< 0.06	< 0.05
Dibromomethane	< 0.06	< 0.06	< 0.05
Bromodichloromethane	< 0.06	< 0.06	< 0.05
4-Methyl-2-pentanone(MIBK)	< 0.6	< 0.6	< 0.5
cis-1,3-Dichloropropene	< 0.06	< 0.06	< 0.05
Toluene	**610**	**520**	< 0.05
trans-1,3-Dichloropropene	< 0.06	< 0.06	< 0.05
1,1,2-Trichloroethane	< 0.06	< 0.06	< 0.05
2-Hexanone	< 0.1	< 0.1	< 0.1
Tetrachloroethene	< 0.06	< 0.06	< 0.05
1,3-Dichloropropane	< 0.06	< 0.06	< 0.05
Dibromochloromethane	< 0.06	< 0.06	< 0.05
1,2-Dibromoethane(EDB)	< 0.03	< 0.02	< 0.02
Chlorobenzene	< 0.06	< 0.06	< 0.05
1,1,1,2-Tetrachloroethane	< 0.06	< 0.06	< 0.05
Ethylbenzene	**150**	**120**	< 0.05
mp-Xylene	**700**	**620**	< 0.05
o-Xylene	**280**	**250**	< 0.05
Styrene	< 0.06	< 0.06	< 0.05
Bromoform	< 0.06	< 0.06	< 0.05
IsoPropylbenzene	**14**	**16**	< 0.05

LABORATORY REPORT

EAI ID#: **211268**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Sample ID:	UST-1	Duplicate	Trip Blank
Lab Sample ID:	211268.01	211268.02	211268.03
Matrix:	soil	soil	soil
Date Sampled:	6/2/20	6/2/20	6/2/20
Date Received:	6/5/20	6/5/20	6/5/20
Units:	mg/kg	mg/kg	mg/kg
Date of Analysis:	6/9/20	6/9/20	6/10/20
Analyst:	JAK	JAK	JAK
Method:	8260C	8260C	8260C
Dilution Factor:	1	1	1
Bromobenzene	< 0.06	< 0.06	< 0.05
1,1,2,2-Tetrachloroethane	< 0.06	< 0.06	< 0.05
1,2,3-Trichloropropane	< 0.06	< 0.06	< 0.05
n-Propylbenzene	**46**	**37**	< 0.05
2-Chlorotoluene	< 0.06	< 0.06	< 0.05
4-Chlorotoluene	< 0.06	< 0.06	< 0.05
1,3,5-Trimethylbenzene	**86**	**70**	< 0.05
tert-Butylbenzene	< 0.06	< 0.06	< 0.05
1,2,4-Trimethylbenzene	**340**	**330**	< 0.05
sec-Butylbenzene	**4.7**	**4.8**	< 0.05
1,3-Dichlorobenzene	< 0.06	< 0.06	< 0.05
p-Isopropyltoluene	**2.6**	**2.7**	< 0.05
1,4-Dichlorobenzene	< 0.06	< 0.06	< 0.05
1,2-Dichlorobenzene	< 0.06	< 0.06	< 0.05
n-Butylbenzene	< 0.06	< 0.06	< 0.05
1,2-Dibromo-3-chloropropane	< 0.06	< 0.06	< 0.05
1,2,4-Trichlorobenzene	< 0.06	< 0.06	< 0.05
Hexachlorobutadiene	< 0.06	< 0.06	< 0.05
Naphthalene	**54**	**43**	< 0.1
1,2,3-Trichlorobenzene	< 0.06	< 0.06	< 0.05
4-Bromofluorobenzene (surr)	**203 %R**	**181 %R**	**86 %R**
1,2-Dichlorobenzene-d4 (surr)	**99 %R**	**101 %R**	**107 %R**
Toluene-d8 (surr)	**102 %R**	**106 %R**	**98 %R**
1,2-Dichloroethane-d4 (surr)	**274 %R**	**266 %R**	**100 %R**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Sample Notes/Deviations:

Deviations from the Report:
UST-1 Parameter: Benzene, Ethylbenzene, IsoPropylbenzene, n-Propylbenzene, 1,3,5-Trimethylbenzene, Naphthalene Date of Analysis: 6/10/2020 Dilution Factor: 10

UST-1 Parameter: Toluene, mp-Xylene, o-Xylene, 1,2,4-Trimethylbenzene Date of Analysis: 6/10/2020 Dilution Factor: 50

Duplicate Parameter: Benzene, Ethylbenzene, n-Propylbenzene,1,3,5-Trimethylbenzene, Naphthalene Date of Analysis: 6/10/2020 Dilution Factor: 10

Duplicate Parameter: Toluene, mp-Xylene, o-Xylene, 1,2,4-Trimethylbenzene Date of Analysis: 6/10/2020 Dilution Factor: 50

The following analytes were not assessed down to the listed concentrations, 1,2-Dibromo-3-Chloropropane (0.0053mg/kg), 1,2,3-Trichloropropane (0.00311mg/kg) due to sample matrix interference.

IsoPropylbenzene, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, sec-Butylbenzene, p-Isopropyltoluene exhibited recovery outside acceptance limits in the Quality Control sample(s). The analyte(s) were not detected in the sample(s).

UST-1 & Duplicate: The surrogates 4-Bromofluorobenzene (surr) & 1,2-Dichloroethane-d4 (surr) demonstrated recovery outside of the acceptance control limits due to non target sample matrix interference.

QC REPORT

EAI ID#: **211268**

Client: **LE Environmental LLC**

Batch ID: 637269-65884/S060520vVT821

Client Designation: **1705 Route 128 | 19-138**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	< 0.1	1.2 (117 %R)	1.1 (114 %R) (3 RPD)	6/5/2020	mg/kg	40 - 160	20	8260C
Chloromethane	< 0.1	1.2 (119 %R)	1.2 (120 %R) (1 RPD)	6/5/2020	mg/kg	40 - 160	20	8260C
Vinyl chloride	< 0.02	0.79 (79 %R)	0.78 (78 %R) (2 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Bromomethane	< 0.1	1.2 (120 %R)	1.1 (112 %R) (7 RPD)	6/5/2020	mg/kg	40 - 160	20	8260C
Chloroethane	< 0.1	0.94 (94 %R)	0.91 (91 %R) (3 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Trichlorofluoromethane	< 0.1	0.99 (99 %R)	0.99 (99 %R) (1 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Diethyl Ether	< 0.05	0.93 (93 %R)	0.93 (93 %R) (0 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Acetone	< 2	< 2 (98 %R)	< 2 (105 %R) (7 RPD)	6/5/2020	mg/kg	40 - 160	20	8260C
1,1-Dichloroethene	< 0.05	0.96 (96 %R)	0.95 (95 %R) (1 RPD)	6/5/2020	mg/kg	59 - 172	20	8260C
Methylene chloride	< 0.1	0.87 (87 %R)	0.84 (84 %R) (3 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Carbon disulfide	< 0.1	0.97 (97 %R)	0.97 (97 %R) (0 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Methyl-t-butyl ether(MTBE)	< 0.1	1.0 (104 %R)	1.0 (105 %R) (0 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
trans-1,2-Dichloroethene	< 0.05	1.1 (108 %R)	1.0 (105 %R) (3 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
1,1-Dichloroethane	< 0.05	1.1 (106 %R)	1.0 (104 %R) (2 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
2,2-Dichloropropane	< 0.05	* 1.5 (145 %R)	* 1.4 (143 %R) (2 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
cis-1,2-Dichloroethene	< 0.05	1.1 (113 %R)	1.1 (113 %R) (1 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
2-Butanone(MEK)	< 0.5	0.97 (97 %R)	1.0 (100 %R) (3 RPD)	6/5/2020	mg/kg	40 - 160	20	8260C
Bromochloromethane	< 0.05	1.1 (106 %R)	1.0 (103 %R) (3 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Tetrahydrofuran(THF)	< 0.5	1.0 (102 %R)	1.0 (104 %R) (2 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Chloroform	< 0.05	1.0 (102 %R)	1.0 (101 %R) (1 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
1,1,1-Trichloroethane	< 0.05	1.2 (119 %R)	1.2 (118 %R) (0 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Carbon tetrachloride	< 0.05	1.1 (112 %R)	1.1 (111 %R) (1 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
1,1-Dichloropropene	< 0.05	1.2 (117 %R)	1.2 (117 %R) (0 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Benzene	< 0.05	1.0 (104 %R)	1.0 (103 %R) (1 RPD)	6/5/2020	mg/kg	66 - 142	20	8260C
1,2-Dichloroethane	< 0.05	0.98 (98 %R)	0.97 (97 %R) (1 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Trichloroethene	< 0.05	1.1 (112 %R)	1.1 (109 %R) (2 RPD)	6/5/2020	mg/kg	62 - 137	20	8260C
1,2-Dichloropropane	< 0.05	1.1 (106 %R)	1.1 (106 %R) (1 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Dibromomethane	< 0.05	0.98 (98 %R)	0.95 (95 %R) (4 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Bromodichloromethane	< 0.05	1.1 (107 %R)	1.0 (104 %R) (3 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
4-Methyl-2-pentanone(MIBK)	< 0.5	1.1 (105 %R)	1.1 (106 %R) (1 RPD)	6/5/2020	mg/kg	40 - 160	20	8260C
cis-1,3-Dichloropropene	< 0.05	1.2 (116 %R)	1.1 (114 %R) (2 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Toluene	< 0.05	1.1 (112 %R)	1.1 (108 %R) (3 RPD)	6/5/2020	mg/kg	59 - 139	20	8260C
trans-1,3-Dichloropropene	< 0.05	1.2 (116 %R)	1.1 (111 %R) (4 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
1,1,2-Trichloroethane	< 0.05	1.1 (106 %R)	1.0 (103 %R) (3 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
2-Hexanone	< 0.1	0.92 (92 %R)	0.93 (93 %R) (1 RPD)	6/5/2020	mg/kg	40 - 160	20	8260C
Tetrachloroethene	< 0.05	1.2 (117 %R)	1.1 (111 %R) (5 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
1,3-Dichloropropane	< 0.05	0.99 (99 %R)	0.95 (95 %R) (4 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Dibromochloromethane	< 0.05	1.0 (102 %R)	0.97 (97 %R) (5 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
1,2-Dibromoethane(EDB)	< 0.02	1.0 (105 %R)	1.0 (103 %R) (2 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Chlorobenzene	< 0.05	1.1 (113 %R)	1.1 (109 %R) (3 RPD)	6/5/2020	mg/kg	60 - 133	20	8260C
1,1,1,2-Tetrachloroethane	< 0.05	1.1 (106 %R)	1.0 (102 %R) (4 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Ethylbenzene	< 0.05	1.2 (124 %R)	1.2 (120 %R) (3 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
mp-Xylene	< 0.05	2.5 (127 %R)	2.4 (122 %R) (4 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
o-Xylene	< 0.05	1.2 (122 %R)	1.2 (118 %R) (4 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Styrene	< 0.05	1.3 (126 %R)	1.1 (114 %R) (10 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Bromoform	< 0.05	1.0 (102 %R)	0.98 (98 %R) (5 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C

QC REPORT

EAI ID#: **211268**

Client: **LE Environmental LLC**

Batch ID: 637269-65884/S060520vVT821

Client Designation: **1705 Route 128 | 19-138**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
IsoPropylbenzene	< 0.05	* 1.4 (142 %R)	* 1.4 (136 %R) (5 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Bromobenzene	< 0.05	1.1 (109 %R)	0.98 (98 %R) (11 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
1,1,2,2-Tetrachloroethane	< 0.05	1.1 (109 %R)	1.0 (101 %R) (8 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
1,2,3-Trichloropropane	< 0.05	1.1 (108 %R)	0.99 (99 %R) (9 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
n-Propylbenzene	< 0.05	1.3 (129 %R)	1.2 (117 %R) (10 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
2-Chlorotoluene	< 0.05	1.2 (124 %R)	1.1 (112 %R) (10 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
4-Chlorotoluene	< 0.05	1.2 (116 %R)	1.0 (104 %R) (11 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
1,3,5-Trimethylbenzene	< 0.05	* 1.3 (132 %R)	1.2 (120 %R) (9 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
tert-Butylbenzene	< 0.05	1.3 (127 %R)	1.1 (114 %R) (11 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
1,2,4-Trimethylbenzene	< 0.05	* 1.3 (131 %R)	1.2 (119 %R) (9 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
sec-Butylbenzene	< 0.05	* 1.3 (134 %R)	1.2 (122 %R) (9 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
1,3-Dichlorobenzene	< 0.05	1.2 (117 %R)	1.1 (108 %R) (8 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
p-Isopropyltoluene	< 0.05	* 1.4 (135 %R)	1.3 (125 %R) (8 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
1,4-Dichlorobenzene	< 0.05	1.1 (110 %R)	1.0 (102 %R) (8 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
1,2-Dichlorobenzene	< 0.05	1.1 (112 %R)	1.0 (103 %R) (8 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
n-Butylbenzene	< 0.05	1.2 (123 %R)	1.1 (114 %R) (8 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
1,2-Dibromo-3-chloropropane	< 0.05	0.96 (96 %R)	0.91 (91 %R) (5 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
1,2,4-Trichlorobenzene	< 0.05	1.1 (107 %R)	1.0 (102 %R) (5 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Hexachlorobutadiene	< 0.05	1.0 (105 %R)	0.99 (99 %R) (5 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
Naphthalene	< 0.1	0.96 (96 %R)	0.96 (96 %R) (0 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
1,2,3-Trichlorobenzene	< 0.05	1.0 (101 %R)	0.99 (99 %R) (2 RPD)	6/5/2020	mg/kg	70 - 130	20	8260C
4-Bromofluorobenzene (surr)	82 %R	97 %R	99 %R	6/5/2020	% Rec	70 - 130	20	8260C
1,2-Dichlorobenzene-d4 (surr)	108 %R	102 %R	99 %R	6/5/2020	% Rec	70 - 130	20	8260C
Toluene-d8 (surr)	97 %R	100 %R	98 %R	6/5/2020	% Rec	70 - 130	20	8260C
1,2-Dichloroethane-d4 (surr)	96 %R	91 %R	91 %R	6/5/2020	% Rec	70 - 130	20	8260C

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
*/!Flagged analyte recoveries deviated from the QA/QC limits. Unless noted on the sample page, flagged analytes that exceed acceptance limits in the Quality Control sample do not impact the data.

LABORATORY REPORT

EAI ID#: **211268**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Client Sample ID:	UST-1
Lab Sample ID:	211268.01
Matrix:	soil
Date Sampled:	6/2/20
Date Received:	6/5/20
Date Prepared:	6/8/20
Units	mg/kg
Method	8270D
Analyst	JMR

	Results	Dilution Factor	Date Analyzed	TEF	TEQ
Naphthalene	**3.5**	1	6/8/20		
2-Methylnaphthalene	**2.6**	1	6/8/20		
1-Methylnaphthalene	**1.2**	1	6/8/20		
Acenaphthylene	**0.042**	1	6/8/20		
Acenaphthene	**0.011**	1	6/8/20		
Fluorene	**0.028**	1	6/8/20		
Phenanthrene	**0.066**	1	6/8/20		
Anthracene	**0.016**	1	6/8/20		
Fluoranthene	**0.079**	1	6/8/20		
Pyrene	**0.082**	1	6/8/20		
Benzo[a]anthracene	**0.041**	1	6/8/20	0.1	.0041
Chrysene	**0.047**	1	6/8/20	0.001	.000047
Benzo[b]fluoranthene	**0.087**	1	6/8/20	0.1	.0087
Benzo[k]fluoranthene	**0.033**	1	6/8/20	0.01	.00033
Benzo[a]pyrene	**0.067**	1	6/8/20	1	.067
Indeno[1,2,3-cd]pyrene	**0.066**	1	6/8/20	0.1	.0066
Dibenz[a,h]anthracene	**0.013**	1	6/8/20	1	.013
Benzo[g,h,i]perylene	**0.068**	1	6/8/20		
p-Terphenyl-D14 (surr)	**70 %R**		6/8/20		

TEF: Toxicity Equivalent Factor

TEQ: Toxicity Equivalence to Benzo[a]pyrene

The TEF factors set forth in this report are taken from the following EPA document: "Mid- Atlantic Risk Assessment User's Guide: November 2013". This guidance document sets forth a recommended, but not mandatory approach based upon currently available information with respect to risk assessment for response actions at CERCLA sites. This document does not establish binding rules. This document contains the most current TEF values per VT IROCP.

LABORATORY REPORT

EAI ID#: **211268**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Client Sample ID:	Duplicate
Lab Sample ID:	211268.02
Matrix:	soil
Date Sampled:	6/2/20
Date Received:	6/5/20
Date Prepared:	6/8/20
Units	mg/kg
Method	8270D
Analyst	JMR

	Results	Dilution Factor	Date Analyzed	TEF	TEQ
Naphthalene	**3.4**	1	6/8/20		
2-Methylnaphthalene	**2.5**	1	6/8/20		
1-Methylnaphthalene	**1.2**	1	6/8/20		
Acenaphthylene	**0.036**	1	6/8/20		
Acenaphthene	**0.010**	1	6/8/20		
Fluorene	**0.026**	1	6/8/20		
Phenanthrene	**0.061**	1	6/8/20		
Anthracene	**0.015**	1	6/8/20		
Fluoranthene	**0.079**	1	6/8/20		
Pyrene	**0.084**	1	6/8/20		
Benzo[a]anthracene	**0.041**	1	6/8/20	0.1	.0041
Chrysene	**0.046**	1	6/8/20	0.001	.000046
Benzo[b]fluoranthene	**0.083**	1	6/8/20	0.1	.0083
Benzo[k]fluoranthene	**0.031**	1	6/8/20	0.01	.00031
Benzo[a]pyrene	**0.064**	1	6/8/20	1	.064
Indeno[1,2,3-cd]pyrene	**0.059**	1	6/8/20	0.1	.0059
Dibenz[a,h]anthracene	**0.012**	1	6/8/20	1	.012
Benzo[g,h,i]perylene	**0.061**	1	6/8/20		
p-Terphenyl-D14 (surr)	**70 %R**		6/8/20		

TEF: Toxicity Equivalent Factor

TEQ: Toxicity Equivalence to Benzo[a]pyrene

The TEF factors set forth in this report are taken from the following EPA document: "Mid- Atlantic Risk Assessment User's Guide: November 2013". This guidance document sets forth a recommended, but not mandatory approach based upon currently available information with respect to risk assessment for response actions at CERCLA sites. This document does not establish binding rules. This document contains the most current TEF values per VT IROCP.

QC REPORT

EAI ID#: **211268**

Client: **LE Environmental LLC**

Batch ID: 637271-98004/S060820PAH1

Client Designation: **1705 Route 128 | 19-138**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Naphthalene	< 0.007	1.3 (79 %R)	1.3 (76 %R) (3 RPD)	6/8/2020	mg/kg	40 - 140	30	8270D
2-Methylnaphthalene	< 0.007	1.4 (84 %R)	1.4 (83 %R) (1 RPD)	6/8/2020	mg/kg	40 - 140	30	8270D
1-Methylnaphthalene	< 0.007	1.3 (79 %R)	1.3 (78 %R) (1 RPD)	6/8/2020	mg/kg	40 - 140	30	8270D
Acenaphthylene	< 0.007	1.4 (82 %R)	1.4 (82 %R) (0 RPD)	6/8/2020	mg/kg	40 - 140	30	8270D
Acenaphthene	< 0.007	1.4 (81 %R)	1.3 (80 %R) (1 RPD)	6/8/2020	mg/kg	40 - 140	30	8270D
Fluorene	< 0.007	1.4 (86 %R)	1.4 (83 %R) (3 RPD)	6/8/2020	mg/kg	40 - 140	30	8270D
Phenanthrene	< 0.007	1.5 (87 %R)	1.4 (82 %R) (7 RPD)	6/8/2020	mg/kg	40 - 140	30	8270D
Anthracene	< 0.007	1.4 (87 %R)	1.4 (81 %R) (7 RPD)	6/8/2020	mg/kg	40 - 140	30	8270D
Fluoranthene	< 0.007	1.5 (88 %R)	1.4 (82 %R) (7 RPD)	6/8/2020	mg/kg	40 - 140	30	8270D
Pyrene	< 0.007	1.5 (87 %R)	1.3 (80 %R) (8 RPD)	6/8/2020	mg/kg	40 - 140	30	8270D
Benzo[a]anthracene	< 0.007	1.5 (89 %R)	1.4 (82 %R) (8 RPD)	6/8/2020	mg/kg	40 - 140	30	8270D
Chrysene	< 0.007	1.5 (88 %R)	1.4 (83 %R) (7 RPD)	6/8/2020	mg/kg	40 - 140	30	8270D
Benzo[b]fluoranthene	< 0.007	1.5 (91 %R)	1.4 (84 %R) (8 RPD)	6/8/2020	mg/kg	40 - 140	30	8270D
Benzo[k]fluoranthene	< 0.007	1.5 (88 %R)	1.3 (81 %R) (9 RPD)	6/8/2020	mg/kg	40 - 140	30	8270D
Benzo[a]pyrene	< 0.007	1.5 (92 %R)	1.4 (84 %R) (9 RPD)	6/8/2020	mg/kg	40 - 140	30	8270D
Indeno[1,2,3-cd]pyrene	< 0.007	1.5 (90 %R)	1.4 (84 %R) (7 RPD)	6/8/2020	mg/kg	40 - 140	30	8270D
Dibenz[a,h]anthracene	< 0.007	1.5 (89 %R)	1.3 (81 %R) (9 RPD)	6/8/2020	mg/kg	40 - 140	30	8270D
Benzo[g,h,i]perylene	< 0.007	1.5 (87 %R)	1.4 (82 %R) (7 RPD)	6/8/2020	mg/kg	40 - 140	30	8270D
p-Terphenyl-D14 (surr)	78 %R	86 %R	83 %R	6/8/2020	mg/kg	30 - 130		8270D

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
*/! Flagged analyte recoveries deviated from the QA/QC limits. Unless noted on the sample page, flagged analytes that exceed acceptance limits in the Quality Control sample do not impact the data.

LABORATORY REPORT

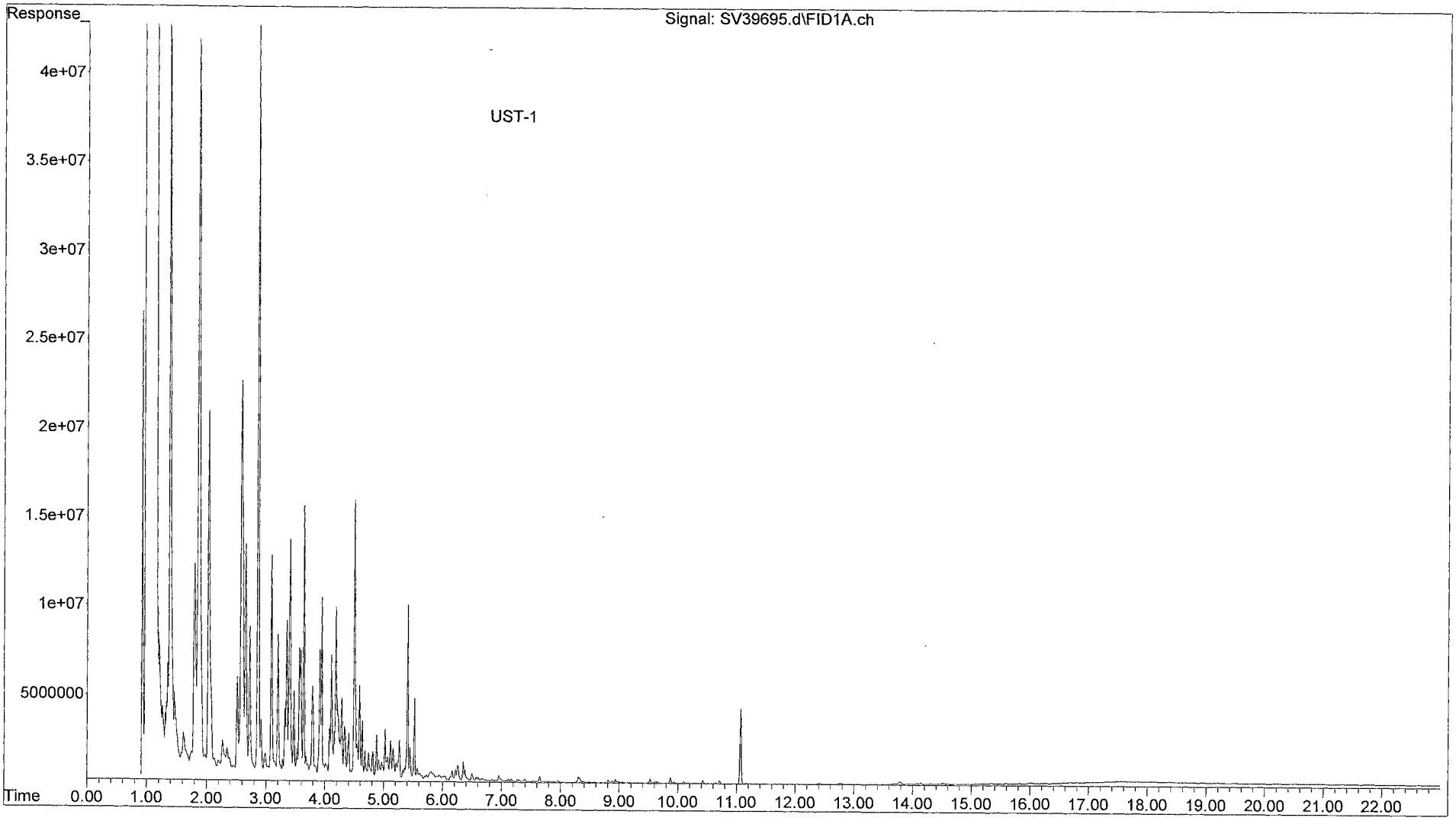
EAI ID#: **211268**

Client: **LE Environmental LLC**

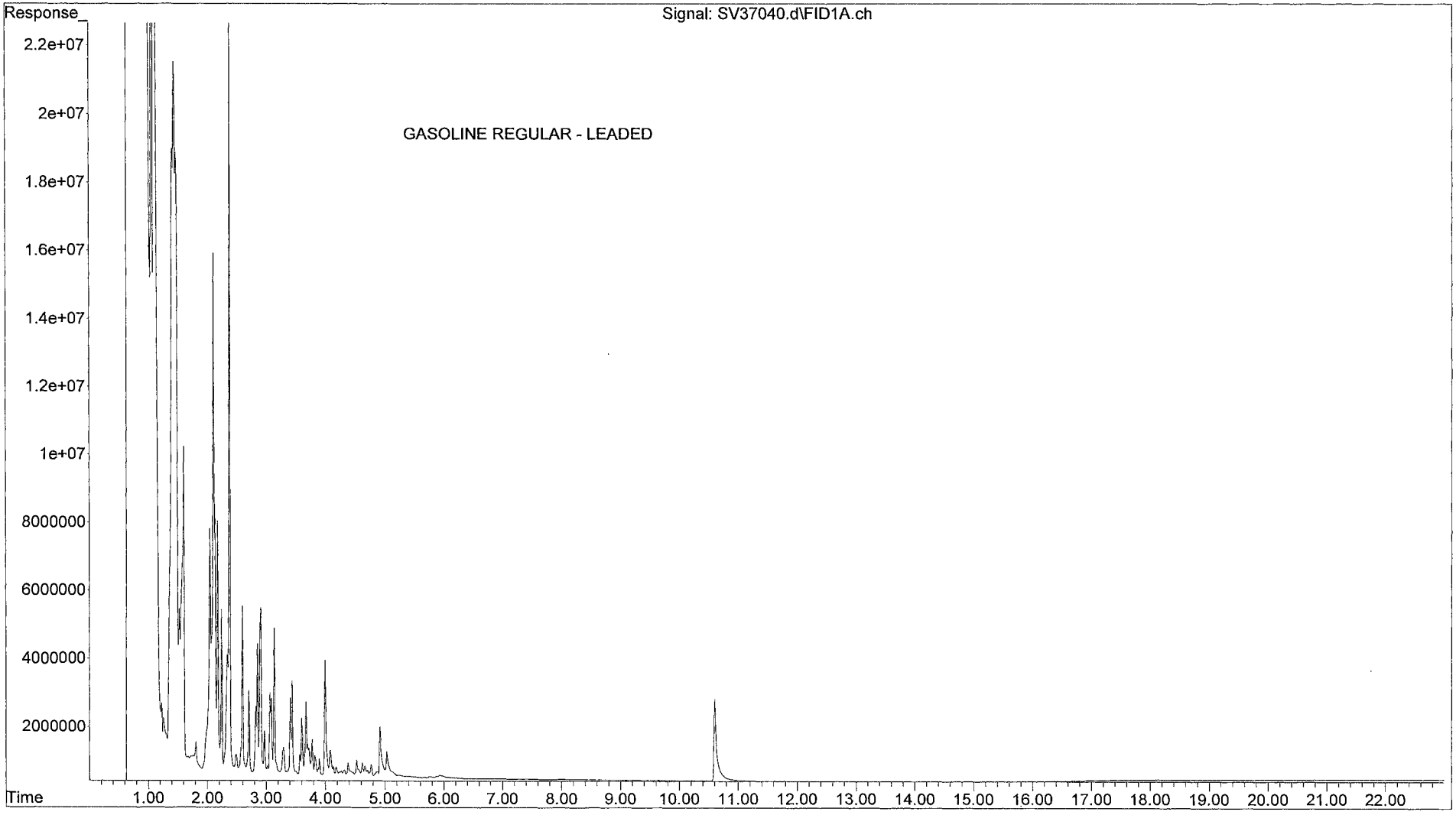
Client Designation: **1705 Route 128 | 19-138**

Sample ID:	UST-1
Lab Sample ID:	211268.01
Matrix:	soil
Date Sampled:	6/2/20
Date Received:	6/5/20
Units:	mg/kg
Date of Extraction/Prep:	6/8/20
Date of Analysis:	6/8/20
Analyst:	JLB
Method:	8100mod
Dilution Factor:	1
TPH (C9-C40)	**170**
p-Terphenyl-D14 (surr)	**70 %R**

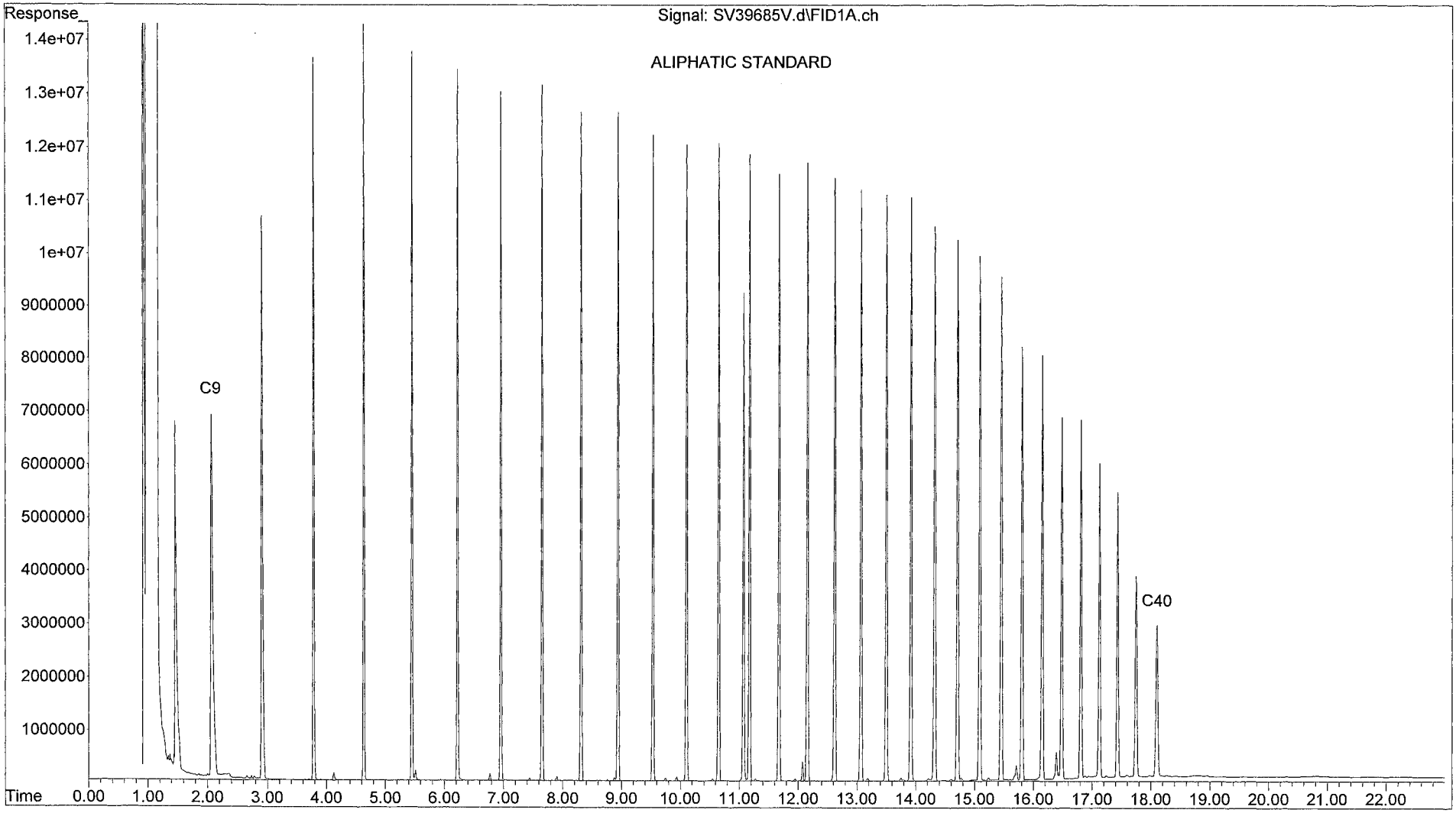
File :C:\msdchem\1\data\060820\SV39695.d
Operator :
Acquired : 8 Jun 2020 15:54 using AcqMethod TPH.M
Instrument : TPHGC2
Sample Name: 211268.01
Misc Info : SOIL, TPHL2
Vial Number: 11



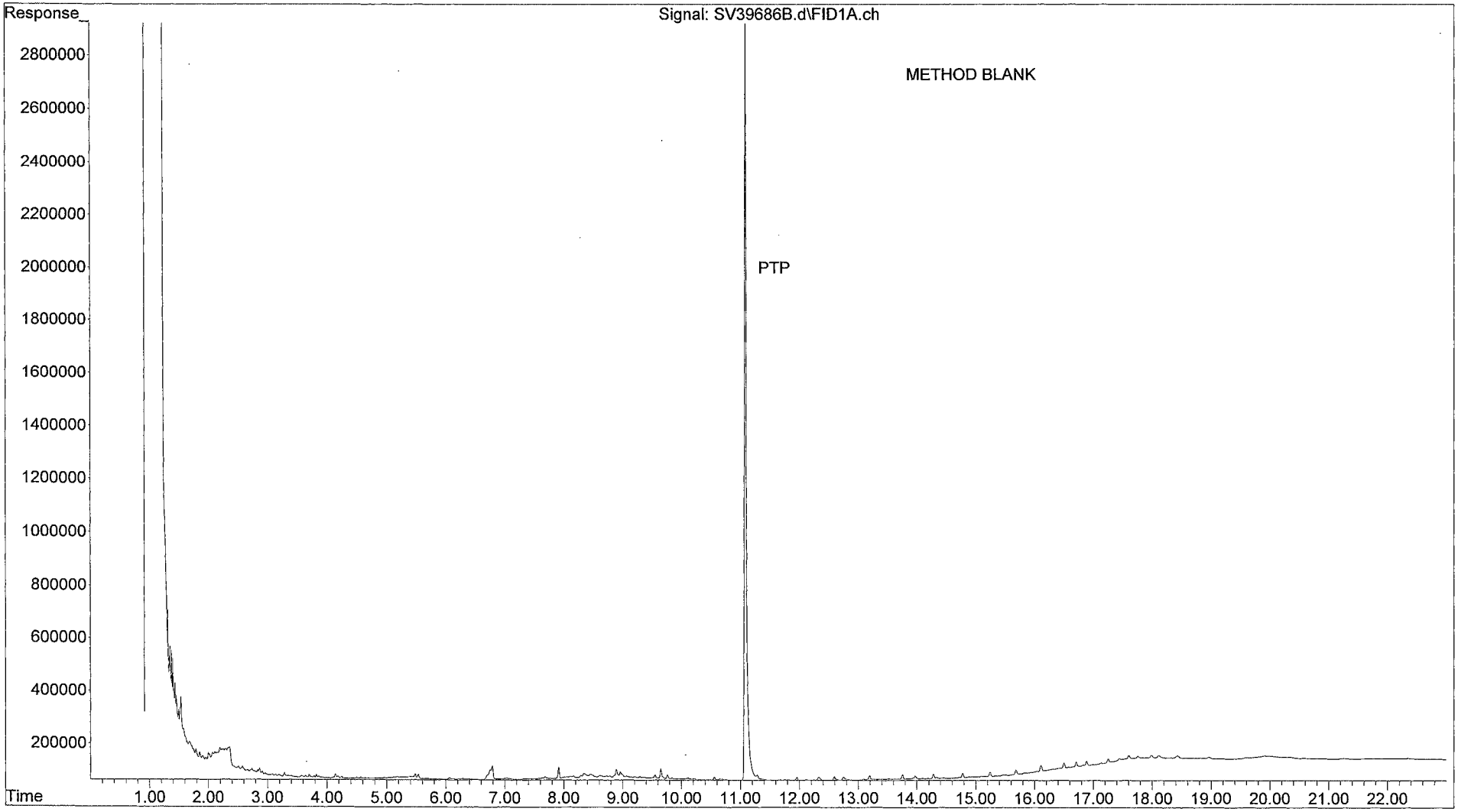
File :C:\msdchem\1\data\FINGERPRINTS\2019\SV37040.d
Operator :
Acquired : 6 Jul 2019 00:38 using AcqMethod TPH.M
Instrument : TPHGC2
Sample Name: GASOLINE REGULAR - LEADED
Misc Info :
Vial Number: 24



File :C:\msdchem\1\data\060820\SV39685V.d
Operator :
Acquired : 8 Jun 2020 10:08 using AcqMethod TPH.M
Instrument : TPHGC2
Sample Name: #13364 ALI PT 5
Misc Info :
Vial Number: 2



File :C:\msdchem\1\data\060820\SV39686B.d
Operator :
Acquired : 8 Jun 2020 11:35 using AcqMethod TPH.M
Instrument : TPHGC2
Sample Name: BLNKS060820TPH1
Misc Info : SOIL, TPH
Vial Number: 3



QC REPORT

EAI ID#: **211268**

Client: **LE Environmental LLC**

Batch ID: 637271-98640/S060820TPH1

Client Designation: **1705 Route 128 | 19-138**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
TPH (C9-C40)	< 20	53 (67 %R)	56 (71 %R) (6 RPD)	6/8/2020	mg/kg	30 - 160	30	8100mod
p-Terphenyl-D14 (surr)	68 %R	73 %R	78 %R	6/8/2020	% Rec	30 - 130		8100mod

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
*/! Flagged analyte recoveries deviated from the QA/QC limits. Unless noted on the sample page, flagged analytes that exceed acceptance limits in the Quality Control sample do not impact the data.

LABORATORY REPORT

EAI ID#: **211268**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Sample ID:	UST-1	Duplicate					
Lab Sample ID:	211268.01	211268.02					
Matrix:	soil	soil					
Date Sampled:	6/2/20	6/2/20					
Date Received:	6/5/20	6/5/20					
			Analytical Matrix	**Units**	**Date of Analysis**	**Method**	**Analyst**
Arsenic	**8.4**	**6.9**	SolTotDry	mg/kg	6/8/20	6020	DS
Barium	**130**	**140**	SolTotDry	mg/kg	6/8/20	6020	DS
Cadmium	**0.56**	**0.52**	SolTotDry	mg/kg	6/8/20	6020	DS
Chromium	**39**	**42**	SolTotDry	mg/kg	6/8/20	6020	DS
Lead	**68**	**56**	SolTotDry	mg/kg	6/8/20	6020	DS
Mercury	**0.11**	< 0.1	SolTotDry	mg/kg	6/8/20	6020	DS
Selenium	< 0.5	< 0.5	SolTotDry	mg/kg	6/8/20	6020	DS
Silver	< 0.5	< 0.5	SolTotDry	mg/kg	6/8/20	6020	DS

Page 1 of 1

Chain-of-Custody Record

211268

Bold Fields Required. Please Circle Requested Analysis.

Sample I.D.	Sampling Date/Time *If Composite, Indicate Both Start & Finish Date/Time	Matrix (see below)	Grab/*Composite	VOC: 524.2 MTBE only; 524.2 BTEX; 524.2 VTICs; 8260 624 1, 4 Dioxane; 8021 BTEX HALOS; 8015 GRO MAPH	SVOC: 8270 625 SVTICs EDB DBCP ABN A BN PAH; TPH8100 L1 L2; 8015 DRO MAEPH; PEST 608 PCB 608 PEST 8081 PCB 8082; Oil & Grease 1664 TPH 1664	TCLP: TCLP 1311 ABN Metals VOC Pest Herb	Metals: Dissolved Metals (List Below); Total Metals (List Below)	Inorganics: TS TSS TDS Spec. Con.; Br Cl F SO_4 NO_2 NO_3 NO_2NO_3; BOD CBOD T. Alk.; TKN NH_3 T. Phos. O. Phos.; pH T. Res. Chlorine; COD Phenols TOC DOC; Total Cyanide Total Sulfide; Reactive Cyanide Reactive Sulfide Flashpoint Ignitability	Micro: Total Coliform E. Coli Fecal Coliform; Enterococci Heterotrophic Plate Count	Other	# of Containers	Notes MeOH Vial #
UST-1	6/2/20; 1545	S	G	X	X X		X			4	50006
Duplicate	6/2/20; 1545	S	G	X	X		X			3	50007
Trip Blank	6/2/20; 0800	S	G	X						1	50009

Matrix: A-Air; S-Soil; GW-Ground Water; SW-Surface Water; DW-Drinking Water; WW-Waste water

Preservative: H-HCL; N-HNO_3; S-H_2SO_4; Na-NaOH; M-MEOH

Project Manager: Angela Emerson

Company: LE Environmental LLC

Address: 21 N. Main St Unit #1

City: Waterbury State: VT Zip: 05676

Phone: 802-917-4228 Ext.:

Fax: —

E-Mail: angela@leenv.net

Site Name: 1705 Route 128

Project #: 19-138

State: NH MA ME (VT) Other:

Regulatory Program: NPDES: RGP POTW Stormwater or GWP, Oil Fund, Brownfield or Other:

Quote #: PO #:

Date Needed: Normal TAT

QA/QC Reporting Level: A B C OR MA MCP

Reporting Options: Prelims: Yes or No

Electronic Options: E-Mail PDF Equis Excel

Temp. 2.5 °C

ICE? (Yes) No

Sampler(s): Angela Emerson

Relinquished By: Angela Emerson Date: 6/5/20 Time: 15:25 Received By: Eric Halvorsen

Relinquished By: Eric Halvorsen Date: 6-5-20 Time: 13:35 Received By:

Relinquished By: Date: Time: Received By:

Metals: (8 RCRA) 13 PP Fe, Mn Pb, Cu

Other Metals:

Samples Field Filtered? ☐ Yes ☐ No

Notes: (ie: Special Detection Limits, Billing Info, If Different)

* 8100 Hydrocarbon Fingerprint ID

Site History: Former Gas Station/Auto Garage

Suspected Contamination: Gasoline

Field Readings: 1,644 ppm

Eastern Analytical, Inc.
professional laboratory and drilling services
25 Chenell Drive | Concord, NH 03301 | Tel: 603.228.0525 | 1.800.287.0525 | E-Mail: CustomerService@EasternAnalytical.com | www.EasternAnalytical.com

(White: Original Green: Project Manager)

Eastern Analytical, Inc.

professional laboratory and drilling services

Angela Emerson
LE Environmental LLC
21 North Main Street #1
Waterbury , VT 05676

Subject: Laboratory Report

Eastern Analytical, Inc. ID: 211572
Client Identification: 1705 Route 128 | 19-138
Date Received: 6/12/2020

Dear Ms. Emerson :

Enclosed please find the laboratory report for the above identified project. All analyses were performed in accordance with our QA/QC Program. Unless otherwise stated, holding times, preservation techniques, container types, and sample conditions adhered to EPA Protocol. Samples which were collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures. Eastern Analytical, Inc. certifies that the enclosed test results meet all requirements of NELAP and other applicable state certifications. Please refer to our website at www.easternanalytical.com for a copy of our NELAP certificate and accredited parameters.

The following standard abbreviations and conventions apply to all EAI reports:

Solid samples are reported on a dry weight basis, unless otherwise noted
< : "less than" followed by the reporting limit
> : "greater than" followed by the reporting limit
%R : % Recovery

Eastern Analytical Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012) and New York (12072).

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the the written approval of the laboratory.

If you have any questions regarding the results contained within, please feel free to directly contact me or the chemist(s) who performed the testing in question. Unless otherwise requested, we will dispose of the sample (s) 30 days from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw — Lorraine Olashaw, Lab Director
6.19.20 — Date
24 — # of pages (excluding cover letter)

SAMPLE CONDITIONS PAGE

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Temperature upon receipt (°C): 3.8 **Received on ice or cold packs (Yes/No): Y**

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date Received	Date Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
211572.01	SB-6	6/12/20	6/5/20	soil	89.7	Adheres to Sample Acceptance Policy
211572.02	SB-7	6/12/20	6/5/20	soil	89.2	Adheres to Sample Acceptance Policy
211572.03	SB-5	6/12/20	6/5/20	soil	73.7	Adheres to Sample Acceptance Policy
211572.04	Duplicate	6/12/20	6/5/20	soil	69.9	Adheres to Sample Acceptance Policy
211572.05	SB-4S	6/12/20	6/5/20	soil	89.6	Adheres to Sample Acceptance Policy
211572.06	SB-4D	6/12/20	6/5/20	soil	85.7	Adheres to Sample Acceptance Policy
211572.07	SB-2S	6/12/20	6/5/20	soil	94.8	Adheres to Sample Acceptance Policy
211572.08	SB-2D	6/12/20	6/5/20	soil	68.6	Adheres to Sample Acceptance Policy
211572.09	SB-1	6/12/20	6/5/20	soil	76.6	Adheres to Sample Acceptance Policy
211572.1	Trip Blank	6/12/20	6/5/20	soil	100.0	Adheres to Sample Acceptance Policy

Samples were properly preserved and the pH measured when applicable unless otherwise noted. Analysis of solids for pH, Flashpoint, Ignitability, Paint Filter, Corrosivity, Conductivity and Specific Gravity are reported on an "as received" basis.
Immediate analyses, pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite, performed at the laboratory were run outside of the recommended 15 minute hold time.
All results contained in this report relate only to the above listed samples.
References include:
1) EPA 600/4-79-020, 1983
2) Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd Edition or noted Revision year.
3) Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
4) Hach Water Analysis Handbook, 4th edition, 1992

LABORATORY REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Sample ID:	SB-6	SB-7	SB-5	Duplicate	SB-4S	SB-4D	SB-2S
Lab Sample ID:	211572.01	211572.02	211572.03	211572.04	211572.05	211572.06	211572.07
Matrix:	soil	soil	soil	soil	soil	soil	soil
Date Sampled:	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20
Date Received:	6/12/20	6/12/20	6/12/20	6/12/20	6/12/20	6/12/20	6/12/20
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date of Analysis:	6/15/20	6/15/20	6/15/20	6/15/20	6/15/20	6/15/20	6/15/20
Analyst:	JAK	JAK	JAK	JAK	JAK	JAK	JAK
Method:	8260C	8260C	8260C	8260C	8260C	8260C	8260C
Dilution Factor:	1	1	1	1	1	1	1
Dichlorodifluoromethane	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chloromethane	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Vinyl chloride	< 0.02	< 0.02	< 0.02	< 0.03	< 0.02	< 0.02	< 0.02
Bromomethane	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chloroethane	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Trichlorofluoromethane	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diethyl Ether	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
Acetone	< 2	< 2	< 2	< 3	< 2	< 2	< 2
1,1-Dichloroethene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
Methylene chloride	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Carbon disulfide	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Methyl-t-butyl ether(MTBE)	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
trans-1,2-Dichloroethene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
1,1-Dichloroethane	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
2,2-Dichloropropane	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
cis-1,2-Dichloroethene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
2-Butanone(MEK)	< 0.5	< 0.5	< 0.6	< 0.7	< 0.5	< 0.5	< 0.5
Bromochloromethane	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
Tetrahydrofuran(THF)	< 0.5	< 0.5	< 0.6	< 0.7	< 0.5	< 0.5	< 0.5
Chloroform	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
1,1,1-Trichloroethane	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
Carbon tetrachloride	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
1,1-Dichloropropene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
Benzene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	**0.079**	< 0.05
1,2-Dichloroethane	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
Trichloroethene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
1,2-Dichloropropane	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
Dibromomethane	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
Bromodichloromethane	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
4-Methyl-2-pentanone(MIBK)	< 0.5	< 0.5	< 0.6	< 0.7	< 0.5	< 0.5	< 0.5
cis-1,3-Dichloropropene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
Toluene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
trans-1,3-Dichloropropene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
1,1,2-Trichloroethane	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
2-Hexanone	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tetrachloroethene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
1,3-Dichloropropane	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
Dibromochloromethane	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
1,2-Dibromoethane(EDB)	< 0.02	< 0.02	< 0.02	< 0.03	< 0.02	< 0.02	< 0.02
Chlorobenzene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
1,1,1,2-Tetrachloroethane	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
Ethylbenzene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	**0.20**	< 0.05
mp-Xylene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	**0.22**	< 0.05
o-Xylene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
Styrene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
Bromoform	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
IsoPropylbenzene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05

LABORATORY REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Sample ID:	SB-6	SB-7	SB-5	Duplicate	SB-4S	SB-4D	SB-2S
Lab Sample ID:	211572.01	211572.02	211572.03	211572.04	211572.05	211572.06	211572.07
Matrix:	soil	soil	soil	soil	soil	soil	soil
Date Sampled:	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20
Date Received:	6/12/20	6/12/20	6/12/20	6/12/20	6/12/20	6/12/20	6/12/20
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date of Analysis:	6/15/20	6/15/20	6/15/20	6/15/20	6/15/20	6/15/20	6/15/20
Analyst:	JAK	JAK	JAK	JAK	JAK	JAK	JAK
Method:	8260C	8260C	8260C	8260C	8260C	8260C	8260C
Dilution Factor:	1	1	1	1	1	1	1
Bromobenzene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
1,1,2,2-Tetrachloroethane	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
1,2,3-Trichloropropane	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
n-Propylbenzene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	**0.11**	< 0.05
2-Chlorotoluene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
4-Chlorotoluene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
1,3,5-Trimethylbenzene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	**0.39**	< 0.05
tert-Butylbenzene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
1,2,4-Trimethylbenzene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	**1.0**	< 0.05
sec-Butylbenzene	< 0.05	< 0.05	**0.13**	< 0.07	< 0.05	< 0.05	< 0.05
1,3-Dichlorobenzene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
p-Isopropyltoluene	< 0.05	< 0.05	**0.098**	< 0.07	< 0.05	< 0.05	< 0.05
1,4-Dichlorobenzene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
1,2-Dichlorobenzene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
n-Butylbenzene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
1,2-Dibromo-3-chloropropane	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
1,2,4-Trichlorobenzene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
Naphthalene	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**0.19**	< 0.1
1,2,3-Trichlorobenzene	< 0.05	< 0.05	< 0.06	< 0.07	< 0.05	< 0.05	< 0.05
4-Bromofluorobenzene (surr)	**87 %R**	**91 %R**	**121 %R**	**99 %R**	**92 %R**	**110 %R**	**91 %R**
1,2-Dichlorobenzene-d4 (surr)	**106 %R**	**107 %R**	**98 %R**	**100 %R**	**102 %R**	**96 %R**	**102 %R**
Toluene-d8 (surr)	**94 %R**	**96 %R**	**92 %R**	**93 %R**	**94 %R**	**94 %R**	**95 %R**
1,2-Dichloroethane-d4 (surr)	**105 %R**	**106 %R**	**103 %R**	**103 %R**	**101 %R**	**97 %R**	**101 %R**

SB-6, SB-7, Duplicate, SB-4S, SB-2S: The following analytes were assessed down to the listed concentrations, 1,2-Dibromo-3-Chloropropane (0.0053mg/kg), 1,2,3-Trichloropropane (0.00311mg/kg). Detectable analytes are reported as J flags and should be considered estimated values.

SB-5, SB-4D: The following analytes were not assessed down to the listed concentrations, 1,2-Dibromo-3-Chloropropane (0.0053mg/kg), 1,2,3-Trichloropropane (0.00311mg/kg), due to sample matrix interference.

Bromomethane exhibited recovery outside acceptance limits in the Quality Control sample(s). The analyte(s) were not detected in the sample(s).

LABORATORY REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Sample ID:	SB-2D	SB-1	Trip Blank
Lab Sample ID:	211572.08	211572.09	211572.1
Matrix:	soil	soil	soil
Date Sampled:	6/5/20	6/5/20	6/5/20
Date Received:	6/12/20	6/12/20	6/12/20
Units:	mg/kg	mg/kg	mg/kg
Date of Analysis:	6/15/20	6/16/20	6/16/20
Analyst:	JAK	JAK	JAK
Method:	8260C	8260C	8260C
Dilution Factor:	1	1	1
Dichlorodifluoromethane	< 0.1	< 0.1	< 0.1
Chloromethane	< 0.1	< 0.1	< 0.1
Vinyl chloride	< 0.03	< 0.02	< 0.02
Bromomethane	< 0.1	< 0.1	< 0.1
Chloroethane	< 0.1	< 0.1	< 0.1
Trichlorofluoromethane	< 0.1	< 0.1	< 0.1
Diethyl Ether	< 0.06	< 0.06	< 0.05
Acetone	< 3	< 2	< 2
1,1-Dichloroethene	< 0.06	< 0.06	< 0.05
Methylene chloride	< 0.1	< 0.1	< 0.1
Carbon disulfide	< 0.1	< 0.1	< 0.1
Methyl-t-butyl ether(MTBE)	**1.8**	< 0.1	< 0.1
trans-1,2-Dichloroethene	< 0.06	< 0.06	< 0.05
1,1-Dichloroethane	< 0.06	< 0.06	< 0.05
2,2-Dichloropropane	< 0.06	< 0.06	< 0.05
cis-1,2-Dichloroethene	< 0.06	< 0.06	< 0.05
2-Butanone(MEK)	< 0.6	< 0.6	< 0.5
Bromochloromethane	< 0.06	< 0.06	< 0.05
Tetrahydrofuran(THF)	< 0.6	< 0.6	< 0.5
Chloroform	< 0.06	< 0.06	< 0.05
1,1,1-Trichloroethane	< 0.06	< 0.06	< 0.05
Carbon tetrachloride	< 0.06	< 0.06	< 0.05
1,1-Dichloropropene	< 0.06	< 0.06	< 0.05
Benzene	**8.7**	< 0.06	< 0.05
1,2-Dichloroethane	< 0.06	< 0.06	< 0.05
Trichloroethene	< 0.06	< 0.06	< 0.05
1,2-Dichloropropane	< 0.06	< 0.06	< 0.05
Dibromomethane	< 0.06	< 0.06	< 0.05
Bromodichloromethane	< 0.06	< 0.06	< 0.05
4-Methyl-2-pentanone(MIBK)	< 0.6	< 0.6	< 0.5
cis-1,3-Dichloropropene	< 0.06	< 0.06	< 0.05
Toluene	**63**	< 0.06	< 0.05
trans-1,3-Dichloropropene	< 0.06	< 0.06	< 0.05
1,1,2-Trichloroethane	< 0.06	< 0.06	< 0.05
2-Hexanone	< 0.1	< 0.1	< 0.1
Tetrachloroethene	< 0.06	< 0.06	< 0.05
1,3-Dichloropropane	< 0.06	< 0.06	< 0.05
Dibromochloromethane	< 0.06	< 0.06	< 0.05
1,2-Dibromoethane(EDB)	< 0.03	< 0.02	< 0.02
Chlorobenzene	< 0.06	< 0.06	< 0.05
1,1,1,2-Tetrachloroethane	< 0.06	< 0.06	< 0.05
Ethylbenzene	**22**	< 0.06	< 0.05
mp-Xylene	**82**	< 0.06	< 0.05
o-Xylene	**32**	< 0.06	< 0.05
Styrene	< 0.06	< 0.06	< 0.05
Bromoform	< 0.06	< 0.06	< 0.05
IsoPropylbenzene	**2.4**	< 0.06	< 0.05

LABORATORY REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Sample ID:	SB-2D	SB-1	Trip Blank
Lab Sample ID:	211572.08	211572.09	211572.1
Matrix:	soil	soil	soil
Date Sampled:	6/5/20	6/5/20	6/5/20
Date Received:	6/12/20	6/12/20	6/12/20
Units:	mg/kg	mg/kg	mg/kg
Date of Analysis:	6/15/20	6/16/20	6/16/20
Analyst:	JAK	JAK	JAK
Method:	8260C	8260C	8260C
Dilution Factor:	1	1	1
Bromobenzene	< 0.06	< 0.06	< 0.05
1,1,2,2-Tetrachloroethane	< 0.06	< 0.06	< 0.05
1,2,3-Trichloropropane	< 0.06	< 0.06	< 0.05
n-Propylbenzene	**7.3**	< 0.06	< 0.05
2-Chlorotoluene	< 0.06	< 0.06	< 0.05
4-Chlorotoluene	< 0.06	< 0.06	< 0.05
1,3,5-Trimethylbenzene	**14**	< 0.06	< 0.05
tert-Butylbenzene	< 0.06	< 0.06	< 0.05
1,2,4-Trimethylbenzene	**53**	< 0.06	< 0.05
sec-Butylbenzene	**0.77**	< 0.06	< 0.05
1,3-Dichlorobenzene	< 0.06	< 0.06	< 0.05
p-Isopropyltoluene	**0.52**	< 0.06	< 0.05
1,4-Dichlorobenzene	< 0.06	< 0.06	< 0.05
1,2-Dichlorobenzene	< 0.06	< 0.06	< 0.05
n-Butylbenzene	< 0.06	< 0.06	< 0.05
1,2-Dibromo-3-chloropropane	< 0.06	< 0.06	< 0.05
1,2,4-Trichlorobenzene	< 0.06	< 0.06	< 0.05
Hexachlorobutadiene	< 0.06	< 0.06	< 0.05
Naphthalene	**7.6**	< 0.1	< 0.1
1,2,3-Trichlorobenzene	< 0.06	< 0.06	< 0.05
4-Bromofluorobenzene (surr)	**120 %R**	**87 %R**	**87 %R**
1,2-Dichlorobenzene-d4 (surr)	**100 %R**	**104 %R**	**104 %R**
Toluene-d8 (surr)	**99 %R**	**94 %R**	**95 %R**
1,2-Dichloroethane-d4 (surr)	**81 %R**	**101 %R**	**101 %R**

Deviations from the Report:
SB-2D Parameter: Toluene, Ethylbenzene, mp-Xylene, o-Xylene, 1,2,4-Trimethylbenzene Date of Analysis: 6/16/2020 Dilution Factor: 13

SB-1, Trip Blank: The following analytes were assessed down to the listed concentrations, 1,2-Dibromo-3-Chloropropane (0.0053mg/kg), 1,2,3-Trichloropropane (0.00311mg/kg). Detectable analytes are reported as J flags and should be considered estimated values.

SB-2D: The following analytes were not assessed down to the listed concentrations, 1,2-Dibromo-3-Chloropropane (0.0053mg/kg), 1,2,3-Trichloropropane (0.00311mg/kg), due to sample matrix interference.

Bromomethane exhibited recovery outside acceptance limits in the Quality Control sample(s). The analyte(s) were not detected in the sample(s).

SB-2D: Isopropylbenzene exhibited recovery outside acceptance limits in the Quality Control sample(s).

QC REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Batch ID: 637278-11730/S061520vVT821

Client Designation: **1705 Route 128 | 19-138**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	< 0.1	1.5 (148 %R)	1.5 (150 %R) (1 RPD)	6/15/2020	mg/kg	40 - 160	20	8260C
Chloromethane	< 0.1	1.5 (153 %R)	1.5 (151 %R) (1 RPD)	6/15/2020	mg/kg	40 - 160	20	8260C
Vinyl chloride	< 0.02	1.1 (109 %R)	1.2 (116 %R) (6 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Bromomethane	< 0.1	1.4 (137 %R)	1.5 (147 %R) (7 RPD)	6/15/2020	mg/kg	40 - 160	20	8260C
Chloroethane	< 0.1	1.2 (119 %R)	1.2 (121 %R) (2 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Trichlorofluoromethane	< 0.1	1.2 (121 %R)	1.2 (122 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Diethyl Ether	< 0.05	1.1 (113 %R)	1.1 (113 %R) (0 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Acetone	< 2	< 2 (126 %R)	< 2 (125 %R) (1 RPD)	6/15/2020	mg/kg	40 - 160	20	8260C
1,1-Dichloroethene	< 0.05	1.1 (112 %R)	1.1 (113 %R) (0 RPD)	6/15/2020	mg/kg	59 - 172	20	8260C
Methylene chloride	< 0.1	0.93 (93 %R)	0.95 (95 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Carbon disulfide	< 0.1	1.1 (109 %R)	1.1 (109 %R) (0 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Methyl-t-butyl ether(MTBE)	< 0.1	1.1 (113 %R)	1.1 (114 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
trans-1,2-Dichloroethene	< 0.05	1.1 (112 %R)	1.1 (113 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
1,1-Dichloroethane	< 0.05	1.1 (114 %R)	1.1 (115 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
2,2-Dichloropropane	< 0.05	* 1.5 (146 %R)	* 1.5 (147 %R) (0 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
cis-1,2-Dichloroethene	< 0.05	1.2 (122 %R)	1.2 (123 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
2-Butanone(MEK)	< 0.5	1.0 (105 %R)	1.1 (105 %R) (0 RPD)	6/15/2020	mg/kg	40 - 160	20	8260C
Bromochloromethane	< 0.05	1.1 (109 %R)	1.1 (110 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Tetrahydrofuran(THF)	< 0.5	1.1 (111 %R)	1.1 (112 %R) (2 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Chloroform	< 0.05	1.1 (109 %R)	1.1 (110 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
1,1,1-Trichloroethane	< 0.05	1.3 (128 %R)	1.3 (129 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Carbon tetrachloride	< 0.05	1.2 (120 %R)	1.2 (121 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
1,1-Dichloropropene	< 0.05	1.2 (124 %R)	1.3 (126 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Benzene	< 0.05	1.1 (109 %R)	1.1 (109 %R) (0 RPD)	6/15/2020	mg/kg	66 - 142	20	8260C
1,2-Dichloroethane	< 0.05	1.1 (108 %R)	1.1 (108 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Trichloroethene	< 0.05	1.2 (119 %R)	1.2 (121 %R) (1 RPD)	6/15/2020	mg/kg	62 - 137	20	8260C
1,2-Dichloropropane	< 0.05	1.1 (114 %R)	1.1 (114 %R) (0 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Dibromomethane	< 0.05	1.0 (102 %R)	1.0 (103 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Bromodichloromethane	< 0.05	1.1 (114 %R)	1.1 (115 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
4-Methyl-2-pentanone(MIBK)	< 0.5	1.1 (109 %R)	1.1 (110 %R) (2 RPD)	6/15/2020	mg/kg	40 - 160	20	8260C
cis-1,3-Dichloropropene	< 0.05	1.2 (122 %R)	1.2 (124 %R) (2 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Toluene	< 0.05	1.1 (111 %R)	1.1 (110 %R) (0 RPD)	6/15/2020	mg/kg	59 - 139	20	8260C
trans-1,3-Dichloropropene	< 0.05	1.2 (116 %R)	1.2 (117 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
1,1,2-Trichloroethane	< 0.05	1.1 (106 %R)	1.1 (105 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
2-Hexanone	< 0.1	0.93 (93 %R)	0.93 (93 %R) (0 RPD)	6/15/2020	mg/kg	40 - 160	20	8260C
Tetrachloroethene	< 0.05	1.1 (114 %R)	1.1 (114 %R) (0 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
1,3-Dichloropropane	< 0.05	0.99 (99 %R)	0.98 (98 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Dibromochloromethane	< 0.05	1.0 (101 %R)	1.0 (102 %R) (0 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
1,2-Dibromoethane(EDB)	< 0.02	1.1 (107 %R)	1.0 (104 %R) (3 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Chlorobenzene	< 0.05	1.1 (111 %R)	1.1 (111 %R) (0 RPD)	6/15/2020	mg/kg	60 - 133	20	8260C
1,1,1,2-Tetrachloroethane	< 0.05	1.1 (106 %R)	1.1 (106 %R) (0 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Ethylbenzene	< 0.05	1.2 (124 %R)	1.2 (124 %R) (0 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
mp-Xylene	< 0.05	2.5 (127 %R)	2.5 (126 %R) (0 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
o-Xylene	< 0.05	1.2 (121 %R)	1.2 (121 %R) (0 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Styrene	< 0.05	1.3 (125 %R)	1.3 (125 %R) (0 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Bromoform	< 0.05	0.98 (98 %R)	1.0 (100 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C

QC REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Batch ID: 637278-11730/S061520vVT821

Client Designation: **1705 Route 128 | 19-138**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
IsoPropylbenzene	< 0.05	* 1.4 (141 %R)	* 1.4 (141 %R) (0 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Bromobenzene	< 0.05	0.95 (95 %R)	0.97 (97 %R) (2 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
1,1,2,2-Tetrachloroethane	< 0.05	0.92 (92 %R)	0.93 (93 %R) (1 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
1,2,3-Trichloropropane	< 0.05	0.93 (93 %R)	0.95 (95 %R) (2 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
n-Propylbenzene	< 0.05	1.2 (116 %R)	1.2 (118 %R) (2 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
2-Chlorotoluene	< 0.05	1.1 (111 %R)	1.1 (114 %R) (2 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
4-Chlorotoluene	< 0.05	1.0 (103 %R)	1.1 (106 %R) (3 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
1,3,5-Trimethylbenzene	< 0.05	1.2 (118 %R)	1.2 (121 %R) (2 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
tert-Butylbenzene	< 0.05	1.1 (114 %R)	1.2 (116 %R) (2 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
1,2,4-Trimethylbenzene	< 0.05	1.2 (118 %R)	1.2 (120 %R) (2 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
sec-Butylbenzene	< 0.05	1.2 (119 %R)	1.2 (121 %R) (2 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
1,3-Dichlorobenzene	< 0.05	1.0 (104 %R)	1.1 (106 %R) (2 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
p-Isopropyltoluene	< 0.05	1.2 (121 %R)	1.2 (123 %R) (2 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
1,4-Dichlorobenzene	< 0.05	0.98 (98 %R)	1.0 (100 %R) (2 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
1,2-Dichlorobenzene	< 0.05	0.99 (99 %R)	1.0 (101 %R) (2 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
n-Butylbenzene	< 0.05	1.1 (113 %R)	1.1 (115 %R) (2 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
1,2-Dibromo-3-chloropropane	< 0.05	0.82 (82 %R)	0.83 (83 %R) (2 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
1,2,4-Trichlorobenzene	< 0.05	0.93 (93 %R)	0.97 (97 %R) (4 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Hexachlorobutadiene	< 0.05	0.92 (92 %R)	0.94 (94 %R) (3 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
Naphthalene	< 0.1	0.85 (85 %R)	0.90 (90 %R) (5 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
1,2,3-Trichlorobenzene	< 0.05	0.90 (90 %R)	0.93 (93 %R) (4 RPD)	6/15/2020	mg/kg	70 - 130	20	8260C
4-Bromofluorobenzene (surr)	87 %R	104 %R	102 %R	6/15/2020	% Rec	70 - 130	20	8260C
1,2-Dichlorobenzene-d4 (surr)	105 %R	99 %R	98 %R	6/15/2020	% Rec	70 - 130	20	8260C
Toluene-d8 (surr)	95 %R	98 %R	97 %R	6/15/2020	% Rec	70 - 130	20	8260C
1,2-Dichloroethane-d4 (surr)	106 %R	98 %R	98 %R	6/15/2020	% Rec	70 - 130	20	8260C

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
*/!Flagged analyte recoveries deviated from the QA/QC limits. Unless noted on the sample page, flagged analytes that exceed acceptance limits in the Quality Control sample do not impact the data.

LABORATORY REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Client Sample ID:	SB-6
Lab Sample ID:	211572.01
Matrix:	soil
Date Sampled:	6/5/20
Date Received:	6/12/20
Date Prepared:	6/15/20
Units	mg/kg
Method	8270D
Analyst	JMR

	Results	Dilution Factor	Date Analyzed	TEF	TEQ
Naphthalene	**0.045**	1	6/15/20		
2-Methylnaphthalene	**0.019**	1	6/15/20		
1-Methylnaphthalene	**0.017**	1	6/15/20		
Acenaphthylene	**0.37**	1	6/15/20		
Acenaphthene	**0.021**	1	6/15/20		
Fluorene	**0.11**	1	6/15/20		
Phenanthrene	**1.0**	1	6/15/20		
Anthracene	**0.26**	1	6/15/20		
Fluoranthene	**2.2**	1	6/15/20		
Pyrene	**2.2**	1	6/15/20		
Benzo[a]anthracene	**1.4**	1	6/15/20	0.1	.14
Chrysene	**1.4**	1	6/15/20	0.001	.0014
Benzo[b]fluoranthene	**2.2**	1	6/15/20	0.1	.22
Benzo[k]fluoranthene	**0.76**	1	6/15/20	0.01	.0076
Benzo[a]pyrene	**1.9**	1	6/15/20	1	1.9
Indeno[1,2,3-cd]pyrene	**1.0**	1	6/15/20	0.1	.1
Dibenz[a,h]anthracene	**0.24**	1	6/15/20	1	.24
Benzo[g,h,i]perylene	**0.84**	1	6/15/20		
p-Terphenyl-D14 (surr)	**61 %R**		6/15/20		

TEF: Toxicity Equivalent Factor

TEQ: Toxicity Equivalence to Benzo[a]pyrene

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LABORATORY REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Client Sample ID:	SB-7
Lab Sample ID:	211572.02
Matrix:	soil
Date Sampled:	6/5/20
Date Received:	6/12/20
Date Prepared:	6/15/20
Units	mg/kg
Method	8270D
Analyst	JMR

	Results	Dilution Factor	Date Analyzed	TEF	TEQ
Naphthalene	**0.024**	1	6/15/20		
2-Methylnaphthalene	**0.0092**	1	6/15/20		
1-Methylnaphthalene	< 0.008	1	6/15/20		
Acenaphthylene	**0.23**	1	6/15/20		
Acenaphthene	**0.011**	1	6/15/20		
Fluorene	**0.051**	1	6/15/20		
Phenanthrene	**0.47**	1	6/15/20		
Anthracene	**0.12**	1	6/15/20		
Fluoranthene	**1.4**	1	6/15/20		
Pyrene	**1.5**	1	6/15/20		
Benzo[a]anthracene	**0.97**	1	6/15/20	0.1	.097
Chrysene	**1.0**	1	6/15/20	0.001	.001
Benzo[b]fluoranthene	**1.5**	1	6/15/20	0.1	.15
Benzo[k]fluoranthene	**0.56**	1	6/15/20	0.01	.0056
Benzo[a]pyrene	**1.3**	1	6/15/20	1	1.3
Indeno[1,2,3-cd]pyrene	**0.74**	1	6/15/20	0.1	.074
Dibenz[a,h]anthracene	**0.16**	1	6/15/20	1	.16
Benzo[g,h,i]perylene	**0.62**	1	6/15/20		
p-Terphenyl-D14 (surr)	**62 %R**		6/15/20		

TEF: Toxicity Equivalent Factor

TEQ: Toxicity Equivalence to Benzo[a]pyrene

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LABORATORY REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Client Sample ID:	SB-5
Lab Sample ID:	211572.03
Matrix:	soil
Date Sampled:	6/5/20
Date Received:	6/12/20
Date Prepared:	6/15/20
Units	mg/kg
Method	8270D
Analyst	JMR

	Results	Dilution Factor	Date Analyzed	TEF	TEQ
Naphthalene	< 0.009	1	6/15/20		
2-Methylnaphthalene	< 0.009	1	6/15/20		
1-Methylnaphthalene	< 0.009	1	6/15/20		
Acenaphthylene	< 0.009	1	6/15/20		
Acenaphthene	< 0.009	1	6/15/20		
Fluorene	< 0.009	1	6/15/20		
Phenanthrene	< 0.009	1	6/15/20		
Anthracene	< 0.009	1	6/15/20		
Fluoranthene	**0.0090**	1	6/15/20		
Pyrene	< 0.009	1	6/15/20		
Benzo[a]anthracene	< 0.009	1	6/15/20	0.1	< .0009
Chrysene	< 0.009	1	6/15/20	0.001	< .00000
Benzo[b]fluoranthene	< 0.009	1	6/15/20	0.1	< .0009
Benzo[k]fluoranthene	< 0.009	1	6/15/20	0.01	< .00009
Benzo[a]pyrene	< 0.009	1	6/15/20	1	< .009
Indeno[1,2,3-cd]pyrene	< 0.009	1	6/15/20	0.1	< .0009
Dibenz[a,h]anthracene	< 0.009	1	6/15/20	1	< .009
Benzo[g,h,i]perylene	< 0.009	1	6/15/20		
p-Terphenyl-D14 (surr)	**58 %R**		6/15/20		

TEF: Toxicity Equivalent Factor

TEQ: Toxicity Equivalence to Benzo[a]pyrene

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LABORATORY REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Client Sample ID:	Duplicate
Lab Sample ID:	211572.04
Matrix:	soil
Date Sampled:	6/5/20
Date Received:	6/12/20
Date Prepared:	6/15/20
Units	mg/kg
Method	8270D
Analyst	JMR

	Results	Dilution Factor	Date Analyzed	TEF	TEQ
Naphthalene	< 0.01	1	6/15/20		
2-Methylnaphthalene	< 0.01	1	6/15/20		
1-Methylnaphthalene	< 0.01	1	6/15/20		
Acenaphthylene	< 0.01	1	6/15/20		
Acenaphthene	< 0.01	1	6/15/20		
Fluorene	< 0.01	1	6/15/20		
Phenanthrene	< 0.01	1	6/15/20		
Anthracene	< 0.01	1	6/15/20		
Fluoranthene	**0.011**	1	6/15/20		
Pyrene	< 0.01	1	6/15/20		
Benzo[a]anthracene	< 0.01	1	6/15/20	0.1	< .001
Chrysene	< 0.01	1	6/15/20	0.001	< .00001
Benzo[b]fluoranthene	< 0.01	1	6/15/20	0.1	< .001
Benzo[k]fluoranthene	< 0.01	1	6/15/20	0.01	< .0001
Benzo[a]pyrene	< 0.01	1	6/15/20	1	< .01
Indeno[1,2,3-cd]pyrene	< 0.01	1	6/15/20	0.1	< .001
Dibenz[a,h]anthracene	< 0.01	1	6/15/20	1	< .01
Benzo[g,h,i]perylene	< 0.01	1	6/15/20		
p-Terphenyl-D14 (surr)	**57 %R**		6/15/20		

TEF: Toxicity Equivalent Factor

TEQ: Toxicity Equivalence to Benzo[a]pyrene

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LABORATORY REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Client Sample ID:	SB-4S
Lab Sample ID:	211572.05
Matrix:	soil
Date Sampled:	6/5/20
Date Received:	6/12/20
Date Prepared:	6/15/20
Units	mg/kg
Method	8270D
Analyst	JMR

	Results	Dilution Factor	Date Analyzed	TEF	TEQ
Naphthalene	< 0.008	1	6/15/20		
2-Methylnaphthalene	< 0.008	1	6/15/20		
1-Methylnaphthalene	< 0.008	1	6/15/20		
Acenaphthylene	**0.017**	1	6/15/20		
Acenaphthene	< 0.008	1	6/15/20		
Fluorene	< 0.008	1	6/15/20		
Phenanthrene	**0.049**	1	6/15/20		
Anthracene	**0.011**	1	6/15/20		
Fluoranthene	**0.10**	1	6/15/20		
Pyrene	**0.10**	1	6/15/20		
Benzo[a]anthracene	**0.052**	1	6/15/20	0.1	.0052
Chrysene	**0.058**	1	6/15/20	0.001	.000058
Benzo[b]fluoranthene	**0.084**	1	6/15/20	0.1	.0084
Benzo[k]fluoranthene	**0.027**	1	6/15/20	0.01	.00027
Benzo[a]pyrene	**0.065**	1	6/15/20	1	.065
Indeno[1,2,3-cd]pyrene	**0.048**	1	6/15/20	0.1	.0048
Dibenz[a,h]anthracene	**0.0094**	1	6/15/20	1	.0094
Benzo[g,h,i]perylene	**0.045**	1	6/15/20		
p-Terphenyl-D14 (surr)	**62 %R**		6/15/20		

TEF: Toxicity Equivalent Factor

TEQ: Toxicity Equivalence to Benzo[a]pyrene

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LABORATORY REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Client Sample ID:	SB-4D
Lab Sample ID:	211572.06
Matrix:	soil
Date Sampled:	6/5/20
Date Received:	6/12/20
Date Prepared:	6/15/20
Units	mg/kg
Method	8270D
Analyst	JMR

	Results	Dilution Factor	Date Analyzed	TEF	TEQ
Naphthalene	**0.012**	1	6/15/20		
2-Methylnaphthalene	**0.0094**	1	6/15/20		
1-Methylnaphthalene	**0.0094**	1	6/15/20		
Acenaphthylene	**0.038**	1	6/15/20		
Acenaphthene	< 0.008	1	6/15/20		
Fluorene	< 0.008	1	6/15/20		
Phenanthrene	**0.013**	1	6/15/20		
Anthracene	**0.012**	1	6/15/20		
Fluoranthene	**0.082**	1	6/15/20		
Pyrene	**0.12**	1	6/15/20		
Benzo[a]anthracene	**0.033**	1	6/15/20	0.1	.0033
Chrysene	**0.039**	1	6/15/20	0.001	.000039
Benzo[b]fluoranthene	**0.15**	1	6/15/20	0.1	.015
Benzo[k]fluoranthene	**0.051**	1	6/15/20	0.01	.00051
Benzo[a]pyrene	**0.12**	1	6/15/20	1	.12
Indeno[1,2,3-cd]pyrene	**0.090**	1	6/15/20	0.1	.009
Dibenz[a,h]anthracene	**0.019**	1	6/15/20	1	.019
Benzo[g,h,i]perylene	**0.087**	1	6/15/20		
p-Terphenyl-D14 (surr)	**55 %R**		6/15/20		

TEF: Toxicity Equivalent Factor

TEQ: Toxicity Equivalence to Benzo[a]pyrene

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LABORATORY REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Client Sample ID:	SB-2S
Lab Sample ID:	211572.07
Matrix:	soil
Date Sampled:	6/5/20
Date Received:	6/12/20
Date Prepared:	6/15/20
Units	mg/kg
Method	8270D
Analyst	JMR

	Results	Dilution Factor	Date Analyzed	TEF	TEQ
Naphthalene	**0.012**	1	6/15/20		
2-Methylnaphthalene	**0.0082**	1	6/15/20		
1-Methylnaphthalene	< 0.007	1	6/15/20		
Acenaphthylene	**0.044**	1	6/15/20		
Acenaphthene	< 0.007	1	6/15/20		
Fluorene	< 0.007	1	6/15/20		
Phenanthrene	**0.10**	1	6/15/20		
Anthracene	**0.031**	1	6/15/20		
Fluoranthene	**0.28**	1	6/15/20		
Pyrene	**0.26**	1	6/15/20		
Benzo[a]anthracene	**0.15**	1	6/15/20	0.1	.015
Chrysene	**0.16**	1	6/15/20	0.001	.00016
Benzo[b]fluoranthene	**0.23**	1	6/15/20	0.1	.023
Benzo[k]fluoranthene	**0.075**	1	6/15/20	0.01	.00075
Benzo[a]pyrene	**0.16**	1	6/15/20	1	.16
Indeno[1,2,3-cd]pyrene	**0.097**	1	6/15/20	0.1	.0097
Dibenz[a,h]anthracene	**0.019**	1	6/15/20	1	.019
Benzo[g,h,i]perylene	**0.087**	1	6/15/20		
p-Terphenyl-D14 (surr)	**67 %R**		6/15/20		

TEF: Toxicity Equivalent Factor

TEQ: Toxicity Equivalence to Benzo[a]pyrene

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LABORATORY REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Client Sample ID:	SB-2D
Lab Sample ID:	211572.08
Matrix:	soil
Date Sampled:	6/5/20
Date Received:	6/12/20
Date Prepared:	6/15/20
Units	mg/kg
Method	8270D
Analyst	JMR

	Results	Dilution Factor	Date Analyzed	TEF	TEQ
Naphthalene	**0.018**	1	6/15/20		
2-Methylnaphthalene	**0.013**	1	6/15/20		
1-Methylnaphthalene	< 0.01	1	6/15/20		
Acenaphthylene	< 0.01	1	6/15/20		
Acenaphthene	< 0.01	1	6/15/20		
Fluorene	< 0.01	1	6/15/20		
Phenanthrene	< 0.01	1	6/15/20		
Anthracene	< 0.01	1	6/15/20		
Fluoranthene	< 0.01	1	6/15/20		
Pyrene	< 0.01	1	6/15/20		
Benzo[a]anthracene	< 0.01	1	6/15/20	0.1	< .001
Chrysene	< 0.01	1	6/15/20	0.001	< .00001
Benzo[b]fluoranthene	< 0.01	1	6/15/20	0.1	< .001
Benzo[k]fluoranthene	< 0.01	1	6/15/20	0.01	< .0001
Benzo[a]pyrene	< 0.01	1	6/15/20	1	< .01
Indeno[1,2,3-cd]pyrene	< 0.01	1	6/15/20	0.1	< .001
Dibenz[a,h]anthracene	< 0.01	1	6/15/20	1	< .01
Benzo[g,h,i]perylene	< 0.01	1	6/15/20		
p-Terphenyl-D14 (surr)	**62 %R**		6/15/20		

TEF: Toxicity Equivalent Factor

TEQ: Toxicity Equivalence to Benzo[a]pyrene

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LABORATORY REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Client Sample ID:	SB-1
Lab Sample ID:	211572.09
Matrix:	soil
Date Sampled:	6/5/20
Date Received:	6/12/20
Date Prepared:	6/15/20
Units	mg/kg
Method	8270D
Analyst	JMR

	Results	Dilution Factor	Date Analyzed	TEF	TEQ
Naphthalene	< 0.009	1	6/15/20		
2-Methylnaphthalene	< 0.009	1	6/15/20		
1-Methylnaphthalene	< 0.009	1	6/15/20		
Acenaphthylene	< 0.009	1	6/15/20		
Acenaphthene	< 0.009	1	6/15/20		
Fluorene	< 0.009	1	6/15/20		
Phenanthrene	< 0.009	1	6/15/20		
Anthracene	< 0.009	1	6/15/20		
Fluoranthene	< 0.009	1	6/15/20		
Pyrene	< 0.009	1	6/15/20		
Benzo[a]anthracene	< 0.009	1	6/15/20	0.1	< .0009
Chrysene	< 0.009	1	6/15/20	0.001	< .00000
Benzo[b]fluoranthene	< 0.009	1	6/15/20	0.1	< .0009
Benzo[k]fluoranthene	< 0.009	1	6/15/20	0.01	< .00009
Benzo[a]pyrene	< 0.009	1	6/15/20	1	< .009
Indeno[1,2,3-cd]pyrene	< 0.009	1	6/15/20	0.1	< .0009
Dibenz[a,h]anthracene	< 0.009	1	6/15/20	1	< .009
Benzo[g,h,i]perylene	< 0.009	1	6/15/20		
p-Terphenyl-D14 (surr)	**62 %R**		6/15/20		

TEF: Toxicity Equivalent Factor

TEQ: Toxicity Equivalence to Benzo[a]pyrene

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QC REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Batch ID: 637278-04821/S061520PAH1

Client Designation: **1705 Route 128 | 19-138**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Naphthalene	< 0.007	1.1 (69 %R)	1.1 (67 %R) (2 RPD)	6/15/2020	mg/kg	40 - 140	30	8270D
2-Methylnaphthalene	< 0.007	1.2 (73 %R)	1.2 (73 %R) (0 RPD)	6/15/2020	mg/kg	40 - 140	30	8270D
1-Methylnaphthalene	< 0.007	1.2 (69 %R)	1.1 (69 %R) (0 RPD)	6/15/2020	mg/kg	40 - 140	30	8270D
Acenaphthylene	< 0.007	1.2 (73 %R)	1.2 (71 %R) (3 RPD)	6/15/2020	mg/kg	40 - 140	30	8270D
Acenaphthene	< 0.007	1.2 (73 %R)	1.2 (71 %R) (2 RPD)	6/15/2020	mg/kg	40 - 140	30	8270D
Fluorene	< 0.007	1.3 (75 %R)	1.2 (74 %R) (2 RPD)	6/15/2020	mg/kg	40 - 140	30	8270D
Phenanthrene	< 0.007	1.2 (75 %R)	1.3 (75 %R) (1 RPD)	6/15/2020	mg/kg	40 - 140	30	8270D
Anthracene	< 0.007	1.2 (74 %R)	1.3 (75 %R) (2 RPD)	6/15/2020	mg/kg	40 - 140	30	8270D
Fluoranthene	< 0.007	1.3 (75 %R)	1.3 (76 %R) (0 RPD)	6/15/2020	mg/kg	40 - 140	30	8270D
Pyrene	< 0.007	1.2 (74 %R)	1.3 (76 %R) (3 RPD)	6/15/2020	mg/kg	40 - 140	30	8270D
Benzo[a]anthracene	< 0.007	1.3 (77 %R)	1.3 (78 %R) (1 RPD)	6/15/2020	mg/kg	40 - 140	30	8270D
Chrysene	< 0.007	1.3 (77 %R)	1.3 (78 %R) (1 RPD)	6/15/2020	mg/kg	40 - 140	30	8270D
Benzo[b]fluoranthene	< 0.007	1.3 (79 %R)	1.3 (80 %R) (1 RPD)	6/15/2020	mg/kg	40 - 140	30	8270D
Benzo[k]fluoranthene	< 0.007	1.2 (74 %R)	1.3 (78 %R) (5 RPD)	6/15/2020	mg/kg	40 - 140	30	8270D
Benzo[a]pyrene	< 0.007	1.3 (79 %R)	1.3 (80 %R) (2 RPD)	6/15/2020	mg/kg	40 - 140	30	8270D
Indeno[1,2,3-cd]pyrene	< 0.007	1.3 (79 %R)	1.3 (80 %R) (1 RPD)	6/15/2020	mg/kg	40 - 140	30	8270D
Dibenz[a,h]anthracene	< 0.007	1.3 (77 %R)	1.3 (78 %R) (1 RPD)	6/15/2020	mg/kg	40 - 140	30	8270D
Benzo[g,h,i]perylene	< 0.007	1.3 (77 %R)	1.3 (78 %R) (1 RPD)	6/15/2020	mg/kg	40 - 140	30	8270D
p-Terphenyl-D14 (surr)	73 %R	76 %R	77 %R	6/15/2020	mg/kg	30 - 130		8270D

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
*/! Flagged analyte recoveries deviated from the QA/QC limits. Unless noted on the sample page, flagged analytes that exceed acceptance limits in the Quality Control sample do not impact the data.

LABORATORY REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Sample ID:	SB-6	SB-7	SB-5	Duplicate	SB-4S	SB-4D	SB-2S
Lab Sample ID:	211572.01	211572.02	211572.03	211572.04	211572.05	211572.06	211572.07
Matrix:	soil	soil	soil	soil	soil	soil	soil
Date Sampled:	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20
Date Received:	6/12/20	6/12/20	6/12/20	6/12/20	6/12/20	6/12/20	6/12/20
% Solid:	89.7	89.2	73.7	69.9	89.6	85.7	94.8
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date of Extraction/Prep:	6/15/20	6/15/20	6/15/20	6/15/20	6/15/20	6/15/20	6/15/20
Date of Analysis:	6/16/20	6/16/20	6/16/20	6/16/20	6/16/20	6/16/20	6/16/20
Analyst:	MA	MA	MA	MA	MA	MA	MA
Extraction Method:	3540C	3540C	3540C	3540C	3540C	3540C	3540C
Analysis Method:	8082A	8082A	8082A	8082A	8082A	8082A	8082A
Dilution Factor:	1	1	1	1	1	1	1
PCB-1016	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1221	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1232	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1242	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1248	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1254	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1260	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1262	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
PCB-1268	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
TMX (surr)	**71 %R**	**77 %R**	**87 %R**	**82 %R**	**90 %R**	**93 %R**	**86 %R**
DCB (surr)	**60 %R**	**57 %R**	**69 %R**	**75 %R**	**70 %R**	**51 %R**	**51 %R**

Acid clean-up was performed on the samples and associated batch QC.

LABORATORY REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Sample ID:	SB-1
Lab Sample ID:	211572.09
Matrix:	soil
Date Sampled:	6/5/20
Date Received:	6/12/20
% Solid:	76.6
Units:	mg/kg
Date of Extraction/Prep:	6/15/20
Date of Analysis:	6/16/20
Analyst:	MA
Extraction Method:	3540C
Analysis Method:	8082A
Dilution Factor:	1

PCB-1016	< 0.02
PCB-1221	< 0.02
PCB-1232	< 0.02
PCB-1242	< 0.02
PCB-1248	< 0.02
PCB-1254	< 0.02
PCB-1260	< 0.02
PCB-1262	< 0.02
PCB-1268	< 0.02
TMX (surr)	**86 %R**
DCB (surr)	**65 %R**

Acid clean-up was performed on the samples and associated batch QC.

QC REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Batch ID: 637278-11645/S061520PCB1

Client Designation: **1705 Route 128 | 19-138**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
PCB-1016	< 0.02	0.14 (103 %R)	0.13 (99 %R) (4 RPD)	6/16/2020	mg/kg	40 - 140	30	8082A
PCB-1221	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	6/16/2020	mg/kg			8082A
PCB-1232	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	6/16/2020	mg/kg			8082A
PCB-1242	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	6/16/2020	mg/kg			8082A
PCB-1248	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	6/16/2020	mg/kg			8082A
PCB-1254	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	6/16/2020	mg/kg			8082A
PCB-1260	< 0.02	0.13 (94 %R)	0.12 (90 %R) (5 RPD)	6/16/2020	mg/kg	40 - 140	30	8082A
PCB-1262	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	6/16/2020	mg/kg			8082A
PCB-1268	< 0.02	< 0.02 (%R N/A)	< 0.02 (%R N/A) (RPD N/A)	6/16/2020	mg/kg			8082A
TMX (surr)	92 %R	90 %R	89 %R	6/16/2020	% Rec	30 - 150	30	8082A
DCB (surr)	100 %R	95 %R	93 %R	6/16/2020	% Rec	30 - 150	30	8082A

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
*/! Flagged analyte recoveries deviated from the QA/QC limits. Unless noted on the sample page, flagged analytes that exceed acceptance limits in the Quality Control sample do not impact the data.

LABORATORY REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Sample ID:	SB-6	SB-7	SB-5	Duplicate					
Lab Sample ID:	211572.01	211572.02	211572.03	211572.04					
Matrix:	soil	soil	soil	soil					
Date Sampled:	6/5/20	6/5/20	6/5/20	6/5/20	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Date Received:	6/12/20	6/12/20	6/12/20	6/12/20					
Arsenic	**5.4**	**4.0**	**6.4**	**6.9**	SolTotDry	mg/kg	6/16/20	6020	DS
Barium	**82**	**56**	**140**	**140**	SolTotDry	mg/kg	6/16/20	6020	DS
Cadmium	< 0.5	< 0.5	< 0.5	< 0.5	SolTotDry	mg/kg	6/16/20	6020	DS
Chromium	**23**	**15**	**35**	**39**	SolTotDry	mg/kg	6/16/20	6020	DS
Lead	**24**	**26**	**14**	**18**	SolTotDry	mg/kg	6/16/20	6020	DS
Mercury	< 0.1	< 0.1	< 0.1	< 0.1	SolTotDry	mg/kg	6/16/20	6020	DS
Selenium	< 0.5	< 0.5	< 0.5	< 0.5	SolTotDry	mg/kg	6/16/20	6020	DS
Silver	< 0.5	< 0.5	< 0.5	< 0.5	SolTotDry	mg/kg	6/16/20	6020	DS

Sample ID:	SB-4S	SB-4D	SB-2S	SB-2D					
Lab Sample ID:	211572.05	211572.06	211572.07	211572.08					
Matrix:	soil	soil	soil	soil					
Date Sampled:	6/5/20	6/5/20	6/5/20	6/5/20	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Date Received:	6/12/20	6/12/20	6/12/20	6/12/20					
Arsenic	**6.0**	**2.7**	**3.1**	**8.6**	SolTotDry	mg/kg	6/16/20	6020	DS
Barium	**43**	**21**	**65**	**140**	SolTotDry	mg/kg	6/16/20	6020	DS
Cadmium	**65**	< 0.5	**2.0**	< 0.5	SolTotDry	mg/kg	6/16/20	6020	DS
Chromium	**36**	**11**	**23**	**39**	SolTotDry	mg/kg	6/16/20	6020	DS
Lead	**45**	**15**	**150**	**16**	SolTotDry	mg/kg	6/16/20	6020	DS
Mercury	< 0.1	< 0.1	< 0.1	< 0.1	SolTotDry	mg/kg	6/16/20	6020	DS
Selenium	< 0.5	< 0.5	< 0.5	< 0.5	SolTotDry	mg/kg	6/16/20	6020	DS
Silver	< 0.5	< 0.5	< 0.5	< 0.5	SolTotDry	mg/kg	6/16/20	6020	DS

LABORATORY REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Sample ID: SB-1

Lab Sample ID: 211572.09

Matrix: soil

Date Sampled: 6/5/20

Date Received: 6/12/20

		Analytical Matrix	Units	Date of Analysis	Method	Analyst
Arsenic	**4.1**	SolTotDry	mg/kg	6/16/20	6020	DS
Barium	**110**	SolTotDry	mg/kg	6/16/20	6020	DS
Cadmium	< 0.5	SolTotDry	mg/kg	6/16/20	6020	DS
Chromium	**34**	SolTotDry	mg/kg	6/16/20	6020	DS
Lead	**12**	SolTotDry	mg/kg	6/16/20	6020	DS
Mercury	< 0.1	SolTotDry	mg/kg	6/16/20	6020	DS
Selenium	< 0.5	SolTotDry	mg/kg	6/16/20	6020	DS
Silver	< 0.5	SolTotDry	mg/kg	6/16/20	6020	DS

QC REPORT

EAI ID#: **211572**

Client: **LE Environmental LLC**

Client Designation: **1705 Route 128 | 19-138**

Parameter Name	Blank	LCS	LCSD		Units	Date of Analysis	Limits	RPD	Method
Arsenic	< 0.5	38 (95 %R)		NA	mg/kg	6/16/20	80 - 120	20	6020
Barium	< 0.5	39 (98 %R)		NA	mg/kg	6/16/20	80 - 120	20	6020
Cadmium	< 0.5	38 (95 %R)		NA	mg/kg	6/16/20	80 - 120	20	6020
Chromium	< 0.5	39 (97 %R)		NA	mg/kg	6/16/20	80 - 120	20	6020
Lead	< 0.5	36 (91 %R)		NA	mg/kg	6/16/20	80 - 120	20	6020
Mercury	< 0.1	0.38 (94 %R)		NA	mg/kg	6/16/20	80 - 120	20	6020
Selenium	< 0.5	38 (95 %R)		NA	mg/kg	6/16/20	80 - 120	20	6020
Silver	< 0.5	38 (94 %R)		NA	mg/kg	6/16/20	80 - 120	20	6020

Samples were analyzed within holding times unless noted on the sample results page.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.
Exceptions to the above statements are flagged or noted above or on the QC Narrative page.
*/! Flagged analyte recoveries deviated from the QA/QC limits.

Page 1 of 1

CHAIN-OF-CUSTODY RECORD

211572

BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS.

SAMPLE I.D.	SAMPLING DATE/TIME *IF COMPOSITE, INDICATE BOTH START & FINISH DATE/TIME	MATRIX (SEE BELOW)	GRAB/*COMPOSITE	VOC: 524.2 BTEX	VOC: 524.2 MTBE ONLY	VOC: 624 VTICS (8260)	VOC: 1,4 DIOXANE	VOC: 8021 BTEX HALOS	VOC: 8015 GRO MAPH	SVOC: 8270 625 SVTICS EDB DBCP	SVOC: ABN A BN PAH	SVOC: TPH8100 L1 L2	SVOC: 8015 DRO MAEPH	SVOC: PEST 608 PEST 8081 PCB 608 PCB 8082	SVOC: OIL & GREASE 1664 TPH 1664	TCLP: TCLP 1311 VOC ABN PEST METALS HERB	DISSOLVED METALS (LIST BELOW)	TOTAL METALS (LIST BELOW)	INORGANICS: TS TSS TDS SPEC. CON.	INORGANICS: BR CL F SO4 NO2 NO3 NO2+NO3	INORGANICS: BOD CBOD T. ALK.	INORGANICS: TKN NH3 T. PHOS. O. PHOS.	INORGANICS: PH T. RES. CHLORINE	INORGANICS: COD PHENOLS TOC DOC	INORGANICS: TOTAL CYANIDE TOTAL SULFIDE	INORGANICS: REACTIVE CYANIDE REACTIVE SULFIDE FLASHPOINT IGNITABILITY	MICRO: TOTAL COLIFORM E. COLI FECAL COLIFORM	MICRO: ENTEROCOCCI HETEROTROPHIC PLATE COUNT	OTHER	# OF CONTAINERS	NOTES MEOH VIAL #
SB-6	6/5/20; 0900	S	G			X				X				X				X												4	50629
SB-7	6/5/20; 0925	S	G			X				X				X				X												4	50626
SB-5	6/5/20; 1010	S	G			X				X				X				X												3	50625
Duplicate	6/5/20; 1010	S	G			X				X				X				X												3	50622
SB-4S	6/5/20; 1100	S	G			X				X				X				X												3	50621
SB-4D	6/5/20; 1110	S	G			X				X				X				X												3	50769
SB-2S	6/5/20; 1215	S	G			X				X				X				X												3	50619
SB-2D	6/5/20; 1235	S	G			X				X								X												3	50623
SB-1	6/5/20; 1300	S	G			X				X				X				X												3	50624
						X																									

MATRIX: A-AIR; S-SOIL; GW-GROUND WATER; SW-SURFACE WATER; DW-DRINKING WATER; WW-WASTE WATER

PRESERVATIVE: H-HCL; N-HNO_3; S-H_2SO_4; Na-NaOH; M-MEOH

PROJECT MANAGER: Angela Emerson

COMPANY: LE Environmental LLC

ADDRESS: 21 N. Main St, Unit #1

CITY: Waterbury STATE: VT ZIP: 05676

PHONE: 802-917-4228 EXT.:

FAX: —

E-MAIL: angela@leenv.net

SITE NAME: 1705 Route 128

PROJECT #: 19-138

STATE: NH MA ME (VT) OTHER:

REGULATORY PROGRAM: NPDES: RGP POTW STORMWATER OR GWP, OIL FUND, BROWNFIELD OR OTHER:

QUOTE #: PO #:

DATE NEEDED: Normal TAT

QA/QC REPORTING LEVEL: A B C OR MA MCP

REPORTING OPTIONS: PRELIMS: YES OR NO

ELECTRONIC OPTIONS: E-MAIL PDF EQUIS EXCEL

TEMP. 3.0 °C

ICE? (YES) NO

SAMPLER(S): Angela Emerson

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
Angela Emerson	6/12/20	11:25	[illegible] Thompson
T. Thompson	6-12-20	13:45	[illegible]
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:

METALS: (8 RCRA) 13 PP FE, MN PB, CU

OTHER METALS:

SAMPLES FIELD FILTERED? ☐ YES ☐ NO

NOTES: (IE: SPECIAL DETECTION LIMITS, BILLING INFO, IF DIFFERENT)

SITE HISTORY: Former Gas Station/Auto Garage

SUSPECTED CONTAMINATION: Petroleum

FIELD READINGS: 2,320 ppm

Eastern Analytical, Inc.
professional laboratory and drilling services
25 CHENELL DRIVE | CONCORD, NH 03301 | TEL: 603.228.0525 | 1.800.287.0525 | E-MAIL: CUSTOMERSERVICE@EASTERNANALYTICAL.COM | WWW.EASTERNANALYTICAL.COM

(WHITE: ORIGINAL GREEN: PROJECT MANAGER)

Eastern Analytical, Inc.

professional laboratory and drilling services

Angela Emerson
LE Environmental LLC
21 North Main Street #1
Waterbury , VT 05676

Subject: Laboratory Report

Eastern Analytical, Inc. ID: 211876
Client Identification: Pigeon Property | 19-138
Date Received: 6/19/2020

Dear Ms. Emerson :

Enclosed please find the laboratory report for the above identified project. All analyses were performed in accordance with our QA/QC Program. Unless otherwise stated, holding times, preservation techniques, container types, and sample conditions adhered to EPA Protocol. Samples which were collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures. Eastern Analytical, Inc. certifies that the enclosed test results meet all requirements of NELAP and other applicable state certifications. Please refer to our website at www.easternanalytical.com for a copy of our NELAP certificate and accredited parameters.

The following standard abbreviations and conventions apply to all EAI reports:

Solid samples are reported on a dry weight basis, unless otherwise noted
< : "less than" followed by the reporting limit
> : "greater than" followed by the reporting limit
%R : % Recovery

Eastern Analytical Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012) and New York (12072).

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the the written approval of the laboratory.

If you have any questions regarding the results contained within, please feel free to directly contact me or the chemist(s) who performed the testing in question. Unless otherwise requested, we will dispose of the sample (s) 30 days from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw, Lab Director | 7.2.20 Date | 15 # of pages (excluding cover letter)

SAMPLE CONDITIONS PAGE

EAI ID#: **211876**

Client: **LE Environmental LLC**

Client Designation: **Pigeon Property | 19-138**

Temperature upon receipt (°C): 1.8 **Received on ice or cold packs (Yes/No): Y**

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date Received	Date Sampled	Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
211876.01	DWS-1	6/19/20	6/17/20	aqueous		Adheres to Sample Acceptance Policy
211876.02	MW-2	6/19/20	6/17/20	aqueous		Adheres to Sample Acceptance Policy
211876.03	MW-1	6/19/20	6/17/20	aqueous		Adheres to Sample Acceptance Policy
211876.04	Duplicate	6/19/20	6/17/20	aqueous		Adheres to Sample Acceptance Policy
211876.05	MW-3	6/19/20	6/17/20	aqueous		Adheres to Sample Acceptance Policy
211876.06	MW-4	6/19/20	6/17/20	aqueous		Adheres to Sample Acceptance Policy
211876.07	MW-5	6/19/20	6/17/20	aqueous		Adheres to Sample Acceptance Policy
211876.08	Trip Blank	6/19/20	5/26/20	aqueous		Adheres to Sample Acceptance Policy

Samples were properly preserved and the pH measured when applicable unless otherwise noted. Analysis of solids for pH, Flashpoint, Ignitability, Paint Filter, Corrosivity, Conductivity and Specific Gravity are reported on an "as received" basis.
Immediate analyses, pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite, performed at the laboratory were run outside of the recommended 15 minute hold time.
All results contained in this report relate only to the above listed samples.
References include:
1) EPA 600/4-79-020, 1983
2) Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd Edition or noted Revision year.
3) Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
4) Hach Water Analysis Handbook, 4th edition, 1992

LABORATORY REPORT

EAI ID#: **211876**

Client: **LE Environmental LLC**

Client Designation: **Pigeon Property | 19-138**

Sample ID:	MW-2	MW-1	Duplicate	MW-3	MW-4	MW-5	Trip Blank
Lab Sample ID:	211876.02	211876.03	211876.04	211876.05	211876.06	211876.07	211876.08
Matrix:	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous
Date Sampled:	6/17/20	6/17/20	6/17/20	6/17/20	6/17/20	6/17/20	5/26/20
Date Received:	6/19/20	6/19/20	6/19/20	6/19/20	6/19/20	6/19/20	6/19/20
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Date of Analysis:	6/25/20	6/27/20	6/27/20	6/27/20	6/27/20	6/25/20	6/25/20
Analyst:	JAK	DGM	DGM	DGM	DGM	JAK	JAK
Method:	8260C	8260C	8260C	8260C	8260C	8260C	8260C
Dilution Factor:	1	100	100	1	1	1	1
Dichlorodifluoromethane	< 2	< 200	< 200	< 2	< 2	< 2	< 2
Chloromethane	< 2	< 200	< 200	< 2	< 2	< 2	< 2
Vinyl chloride	< 1	< 100	< 100	< 1	< 1	< 1	< 1
Bromomethane	< 2	< 200	< 200	< 2	< 2	< 2	< 2
Chloroethane	< 2	< 200	< 200	< 2	< 2	< 2	< 2
Trichlorofluoromethane	< 2	< 200	< 200	< 2	< 2	< 2	< 2
Diethyl Ether	< 2	< 200	< 200	< 2	< 2	< 2	< 2
Acetone	**12**	< 1000	< 1000	**19**	< 10	**50**	< 10
1,1-Dichloroethene	< 0.5	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5
Methylene chloride	< 1	< 100	< 100	< 1	< 1	< 1	< 1
Carbon disulfide	< 2	< 200	< 200	< 2	< 2	< 2	< 2
Methyl-t-butyl ether(MTBE)	< 1	**2100**	**2100**	< 1	**2.8**	< 1	< 1
trans-1,2-Dichloroethene	< 1	< 100	< 100	< 1	< 1	< 1	< 1
1,1-Dichloroethane	< 1	< 100	< 100	< 1	< 1	< 1	< 1
2,2-Dichloropropane	< 1	< 100	< 100	< 1	< 1	< 1	< 1
cis-1,2-Dichloroethene	< 1	< 100	< 100	< 1	< 1	< 1	< 1
2-Butanone(MEK)	< 10	< 1000	< 1000	< 10	< 10	< 10	< 10
Bromochloromethane	< 1	< 100	< 100	< 1	< 1	< 1	< 1
Tetrahydrofuran(THF)	< 10	< 1000	< 1000	< 10	< 10	< 10	< 10
Chloroform	< 1	< 100	< 100	< 1	< 1	< 1	< 1
1,1,1-Trichloroethane	< 1	< 100	< 100	< 1	< 1	< 1	< 1
Carbon tetrachloride	< 1	< 100	< 100	< 1	< 1	< 1	< 1
1,1-Dichloropropene	< 1	< 100	< 100	< 1	< 1	< 1	< 1
Benzene	**1.3**	**14000**	**13000**	< 1	< 1	**1.8**	< 1
1,2-Dichloroethane	< 1	< 100	< 100	< 1	< 1	< 1	< 1
Trichloroethene	< 1	< 100	< 100	< 1	< 1	< 1	< 1
1,2-Dichloropropane	< 1	< 100	< 100	< 1	< 1	< 1	< 1
Dibromomethane	< 1	< 100	< 100	< 1	< 1	< 1	< 1
Bromodichloromethane	< 0.5	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone(MIBK)	< 10	< 1000	< 1000	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 0.5	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	**1.1**	**34000**	**34000**	< 1	< 1	**8.2**	< 1
trans-1,3-Dichloropropene	< 0.5	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloroethane	< 1	< 100	< 100	< 1	< 1	< 1	< 1
2-Hexanone	< 10	< 1000	< 1000	< 10	< 10	< 10	< 10
Tetrachloroethene	< 1	< 100	< 100	< 1	< 1	< 1	< 1
1,3-Dichloropropane	< 1	< 100	< 100	< 1	< 1	< 1	< 1
Dibromochloromethane	< 1	< 100	< 100	< 1	< 1	< 1	< 1
1,2-Dibromoethane(EDB)	< 0.5	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	< 1	< 100	< 100	< 1	< 1	< 1	< 1
1,1,1,2-Tetrachloroethane	< 1	< 100	< 100	< 1	< 1	< 1	< 1
Ethylbenzene	**9.4**	**3900**	**4000**	< 1	< 1	**1**	< 1
mp-Xylene	**18**	**13000**	**14000**	< 1	< 1	**3.6**	< 1
o-Xylene	**2**	**6000**	**6300**	< 1	< 1	**1.3**	< 1
Styrene	< 1	< 100	< 100	< 1	< 1	< 1	< 1
Bromoform	< 2	< 200	< 200	< 2	< 2	< 2	< 2
IsoPropylbenzene	**1.5**	**120**	**140**	< 1	< 1	< 1	< 1

LABORATORY REPORT

EAI ID#: **211876**

Client: **LE Environmental LLC**

Client Designation: **Pigeon Property | 19-138**

Sample ID:	MW-2	MW-1	Duplicate	MW-3	MW-4	MW-5	Trip Blank
Lab Sample ID:	211876.02	211876.03	211876.04	211876.05	211876.06	211876.07	211876.08
Matrix:	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous
Date Sampled:	6/17/20	6/17/20	6/17/20	6/17/20	6/17/20	6/17/20	5/26/20
Date Received:	6/19/20	6/19/20	6/19/20	6/19/20	6/19/20	6/19/20	6/19/20
Units:	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Date of Analysis:	6/25/20	6/27/20	6/27/20	6/27/20	6/27/20	6/25/20	6/25/20
Analyst:	JAK	DGM	DGM	DGM	DGM	JAK	JAK
Method:	8260C	8260C	8260C	8260C	8260C	8260C	8260C
Dilution Factor:	1	100	100	1	1	1	1
Bromobenzene	< 1	< 100	< 100	< 1	< 1	< 1	< 1
1,1,2,2-Tetrachloroethane	< 1	< 100	< 100	< 1	< 1	< 1	< 1
1,2,3-Trichloropropane	< 0.5	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5
n-Propylbenzene	**4.1**	**330**	**380**	< 1	< 1	< 1	< 1
2-Chlorotoluene	< 1	< 100	< 100	< 1	< 1	< 1	< 1
4-Chlorotoluene	< 1	< 100	< 100	< 1	< 1	< 1	< 1
1,3,5-Trimethylbenzene	**7.1**	**770**	**890**	< 1	< 1	< 1	< 1
tert-Butylbenzene	**2.1**	< 100	< 100	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	**22**	**2900**	**3200**	< 1	< 1	**1.4**	< 1
sec-Butylbenzene	**2.3**	< 100	< 100	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	< 1	< 100	< 100	< 1	< 1	< 1	< 1
p-Isopropyltoluene	**1.1**	< 100	< 100	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	< 1	< 100	< 100	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	< 1	< 100	< 100	< 1	< 1	< 1	< 1
n-Butylbenzene	< 1	< 100	< 100	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	< 0.2	< 20	< 20	< 0.2	< 0.2	< 0.2	< 0.2
1,2,4-Trichlorobenzene	< 1	< 100	< 100	< 1	< 1	< 1	< 1
Hexachlorobutadiene	< 0.5	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	**5.3**	**640**	**690**	< 0.5	< 0.5	**0.55**	< 0.5
1,2,3-Trichlorobenzene	< 0.5	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr)	**111 %R**	**96 %R**	**95 %R**	**90 %R**	**91 %R**	**103 %R**	**90 %R**
1,2-Dichlorobenzene-d4 (surr)	**98 %R**	**94 %R**	**92 %R**	**95 %R**	**97 %R**	**102 %R**	**106 %R**
Toluene-d8 (surr)	**101 %R**	**107 %R**	**108 %R**	**108 %R**	**111 %R**	**104 %R**	**99 %R**
1,2-Dichloroethane-d4 (surr)	**110 %R**	**104 %R**	**106 %R**	**102 %R**	**106 %R**	**108 %R**	**110 %R**

Client: **LE Environmental LLC**

Client Designation: **Pigeon Property | 19-138**

Sample Notes/Deviations:

Deviations from the Report:
MW-1, Duplicate Parameter: Toluene Date of Analysis: 6/30/2020 Dilution Factor: 500

MW-2: Acetone, n-Propylbenzene, 1,3,5-Trimethylbenzene, tert-Butylbenzene, 1,2,4-Trimethylbenzene, sec-Butylbenzene, Naphthalene exhibited recovery outside acceptance limits in the Quality Control sample(s).

MW-5: Acetone, 1,2,4-Trimethylbenzene, Naphthalene exhibited recovery outside acceptance limits in the Quality Control sample(s).

MW-5: Benzene, Toluene, Ethylbenzene, mp-Xylene, o-Xylene, 1,2,4-Trimethylbenzene may be the result of carryover from Duplicate sample. There were no additional vials available for reanalysis.

MW-1, Duplicate, MW-3, and MW-4: Bromoform exhibited recovery outside acceptance limits in the Quality Control sample(s). The analyte(s) were not detected in the sample(s).

The following analytes were not assessed down to the listed concentrations, 1,2-dibromoethane(EDB) (0.05ug/L), 1,2,3-Trichloropropane (0.02ug/L). Due to sample matrix interference and/or insuficient sample volume provided.

QC REPORT

EAI ID#: **211876**

Client: **LE Environmental LLC**

Batch ID: 637286-94709/A062520vVT821

Client Designation: **Pigeon Property | 19-138**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	< 2	26 (128 %R)	22 (110 %R) (15 RPD)	6/25/2020	ug/L	40 - 160	20	8260C
Chloromethane	< 2	* 37 (186 %R)	27 (137 %R) (30 RPD) !	6/25/2020	ug/L	40 - 160	20	8260C
Vinyl chloride	< 1	* 34 (168 %R)	26 (128 %R) (27 RPD) !	6/25/2020	ug/L	70 - 130	20	8260C
Bromomethane	< 2	14 (71 %R)	16 (79 %R) (11 RPD)	6/25/2020	ug/L	40 - 160	20	8260C
Chloroethane	< 2	26 (128 %R)	25 (127 %R) (0 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Trichlorofluoromethane	< 2	19 (94 %R)	19 (97 %R) (3 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Diethyl Ether	< 2	22 (110 %R)	* 28 (138 %R) (23 RPD) !	6/25/2020	ug/L	70 - 130	20	8260C
Acetone	< 10	29 (145 %R)	* 36 (178 %R) (21 RPD) !	6/25/2020	ug/L	40 - 160	20	8260C
1,1-Dichloroethene	< 0.5	20 (100 %R)	21 (104 %R) (3 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Methylene chloride	< 1	19 (97 %R)	18 (92 %R) (6 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Carbon disulfide	< 2	24 (119 %R)	22 (108 %R) (10 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Methyl-t-butyl ether(MTBE)	< 1	21 (103 %R)	20 (101 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
trans-1,2-Dichloroethene	< 1	19 (94 %R)	17 (86 %R) (9 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,1-Dichloroethane	< 1	21 (106 %R)	20 (99 %R) (7 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
2,2-Dichloropropane	< 1	24 (118 %R)	22 (108 %R) (9 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
cis-1,2-Dichloroethene	< 1	23 (116 %R)	22 (111 %R) (4 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
2-Butanone(MEK)	< 10	24 (118 %R)	26 (128 %R) (8 RPD)	6/25/2020	ug/L	40 - 160	20	8260C
Bromochloromethane	< 1	17 (84 %R)	16 (81 %R) (4 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Tetrahydrofuran(THF)	< 10	26 (129 %R)	* 28 (139 %R) (8 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Chloroform	< 1	19 (97 %R)	18 (91 %R) (7 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,1,1-Trichloroethane	< 1	21 (105 %R)	19 (96 %R) (9 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Carbon tetrachloride	< 1	19 (95 %R)	17 (86 %R) (10 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,1-Dichloropropene	< 1	22 (109 %R)	20 (99 %R) (10 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Benzene	< 1	21 (103 %R)	19 (95 %R) (7 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,2-Dichloroethane	< 1	20 (98 %R)	19 (95 %R) (3 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Trichloroethene	< 1	20 (99 %R)	18 (92 %R) (8 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,2-Dichloropropane	< 1	22 (108 %R)	21 (103 %R) (5 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Dibromomethane	< 1	18 (91 %R)	18 (90 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Bromodichloromethane	< 0.5	21 (106 %R)	20 (100 %R) (5 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
4-Methyl-2-pentanone(MIBK)	< 10	21 (104 %R)	23 (113 %R) (8 RPD)	6/25/2020	ug/L	40 - 160	20	8260C
cis-1,3-Dichloropropene	< 0.5	23 (115 %R)	22 (111 %R) (3 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Toluene	< 1	22 (108 %R)	20 (99 %R) (9 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
trans-1,3-Dichloropropene	< 0.5	24 (120 %R)	24 (118 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,1,2-Trichloroethane	< 1	22 (110 %R)	21 (107 %R) (3 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
2-Hexanone	< 10	28 (142 %R)	30 (152 %R) (6 RPD)	6/25/2020	ug/L	40 - 160	20	8260C
Tetrachloroethene	< 1	18 (92 %R)	16 (82 %R) (11 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,3-Dichloropropane	< 1	22 (108 %R)	21 (104 %R) (3 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Dibromochloromethane	< 1	19 (95 %R)	18 (90 %R) (4 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,2-Dibromoethane(EDB)	< 0.5	20 (99 %R)	20 (99 %R) (0 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Chlorobenzene	< 1	20 (102 %R)	19 (95 %R) (8 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,1,1,2-Tetrachloroethane	< 1	19 (97 %R)	18 (90 %R) (7 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Ethylbenzene	< 1	23 (117 %R)	21 (107 %R) (9 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
mp-Xylene	< 1	46 (114 %R)	42 (104 %R) (9 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
o-Xylene	< 1	21 (106 %R)	19 (97 %R) (9 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Styrene	< 1	24 (119 %R)	22 (110 %R) (8 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Bromoform	< 2	17 (87 %R)	17 (86 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	20	8260C

QC REPORT

EAI ID#: **211876**

Client: **LE Environmental LLC**

Batch ID: 637286-94709/A062520vVT821

Client Designation: **Pigeon Property | 19-138**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
IsoPropylbenzene	< 1	25 (127 %R)	23 (115 %R) (10 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Bromobenzene	< 1	20 (101 %R)	19 (94 %R) (8 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,1,2,2-Tetrachloroethane	< 1	25 (124 %R)	25 (124 %R) (0 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,2,3-Trichloropropane	< 0.5	22 (110 %R)	22 (111 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
n-Propylbenzene	< 1	* 29 (143 %R)	26 (129 %R) (10 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
2-Chlorotoluene	< 1	* 27 (137 %R)	25 (125 %R) (9 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
4-Chlorotoluene	< 1	26 (128 %R)	24 (118 %R) (8 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,3,5-Trimethylbenzene	< 1	* 26 (132 %R)	24 (119 %R) (11 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
tert-Butylbenzene	< 1	* 27 (134 %R)	24 (120 %R) (11 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,2,4-Trimethylbenzene	< 1	* 26 (131 %R)	24 (119 %R) (10 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
sec-Butylbenzene	< 1	* 28 (140 %R)	25 (125 %R) (11 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,3-Dichlorobenzene	< 1	22 (109 %R)	20 (99 %R) (9 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
p-Isopropyltoluene	< 1	23 (116 %R)	21 (103 %R) (11 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,4-Dichlorobenzene	< 1	21 (103 %R)	19 (94 %R) (9 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,2-Dichlorobenzene	< 1	21 (103 %R)	19 (96 %R) (8 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
n-Butylbenzene	< 1	* 27 (133 %R)	24 (119 %R) (12 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,2-Dibromo-3-chloropropane	< 0.2	19 (93 %R)	19 (96 %R) (4 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,2,4-Trichlorobenzene	< 1	18 (91 %R)	17 (85 %R) (7 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Hexachlorobutadiene	< 0.5	16 (82 %R)	15 (74 %R) (10 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
Naphthalene	< 0.5	18 (91 %R)	18 (92 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
1,2,3-Trichlorobenzene	< 0.5	20 (99 %R)	19 (95 %R) (4 RPD)	6/25/2020	ug/L	70 - 130	20	8260C
4-Bromofluorobenzene (surr)	93 %R	108 %R	108 %R	6/25/2020	% Rec	70 - 130	50	8260C
1,2-Dichlorobenzene-d4 (surr)	107 %R	100 %R	98 %R	6/25/2020	% Rec	70 - 130	50	8260C
Toluene-d8 (surr)	98 %R	106 %R	105 %R	6/25/2020	% Rec	70 - 130	50	8260C
1,2-Dichloroethane-d4 (surr)	117 %R	103 %R	104 %R	6/25/2020	% Rec	70 - 130	20	8260C

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
*/!Flagged analyte recoveries deviated from the QA/QC limits. Unless noted on the sample page, flagged analytes that exceed acceptance limits in the Quality Control sample do not impact the data.

QC REPORT

EAI ID#: **211876**

Client: **LE Environmental LLC**

Batch ID: 637292-11728/A062620vVT821

Client Designation: **Pigeon Property | 19-138**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	< 2	30 (149 %R)	28 (141 %R) (6 RPD)	6/27/2020	ug/L	40 - 160	20	8260C
Chloromethane	< 2	25 (127 %R)	24 (122 %R) (4 RPD)	6/27/2020	ug/L	40 - 160	20	8260C
Vinyl chloride	< 1	* 32 (159 %R)	* 30 (149 %R) (6 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Bromomethane	< 2	23 (113 %R)	22 (110 %R) (3 RPD)	6/27/2020	ug/L	40 - 160	20	8260C
Chloroethane	< 2	25 (125 %R)	24 (118 %R) (5 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Trichlorofluoromethane	< 2	21 (106 %R)	20 (102 %R) (4 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Diethyl Ether	< 2	21 (107 %R)	21 (103 %R) (4 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Acetone	< 10	23 (114 %R)	23 (113 %R) (0 RPD)	6/27/2020	ug/L	40 - 160	20	8260C
1,1-Dichloroethene	< 0.5	20 (102 %R)	20 (99 %R) (4 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Methylene chloride	< 1	21 (106 %R)	20 (102 %R) (3 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Carbon disulfide	< 2	21 (104 %R)	20 (100 %R) (4 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Methyl-t-butyl ether(MTBE)	< 1	20 (100 %R)	19 (96 %R) (4 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
trans-1,2-Dichloroethene	< 1	21 (104 %R)	20 (99 %R) (4 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,1-Dichloroethane	< 1	20 (101 %R)	20 (100 %R) (1 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
2,2-Dichloropropane	< 1	15 (75 %R)	15 (73 %R) (4 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
cis-1,2-Dichloroethene	< 1	18 (89 %R)	17 (87 %R) (2 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
2-Butanone(MEK)	< 10	21 (104 %R)	20 (99 %R) (5 RPD)	6/27/2020	ug/L	40 - 160	20	8260C
Bromochloromethane	< 1	19 (97 %R)	19 (95 %R) (2 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Tetrahydrofuran(THF)	< 10	22 (109 %R)	20 (102 %R) (6 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Chloroform	< 1	20 (100 %R)	19 (97 %R) (3 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,1,1-Trichloroethane	< 1	19 (97 %R)	18 (92 %R) (5 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Carbon tetrachloride	< 1	16 (81 %R)	16 (79 %R) (2 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,1-Dichloropropene	< 1	20 (99 %R)	19 (96 %R) (3 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Benzene	< 1	20 (101 %R)	19 (97 %R) (5 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,2-Dichloroethane	< 1	19 (96 %R)	18 (92 %R) (4 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Trichloroethene	< 1	20 (98 %R)	20 (100 %R) (2 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,2-Dichloropropane	< 1	19 (97 %R)	19 (95 %R) (2 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Dibromomethane	< 1	19 (95 %R)	19 (93 %R) (1 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Bromodichloromethane	< 0.5	17 (85 %R)	17 (83 %R) (2 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
4-Methyl-2-pentanone(MIBK)	< 10	21 (106 %R)	20 (99 %R) (6 RPD)	6/27/2020	ug/L	40 - 160	20	8260C
cis-1,3-Dichloropropene	< 0.5	17 (85 %R)	17 (83 %R) (2 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Toluene	< 1	22 (109 %R)	21 (105 %R) (3 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
trans-1,3-Dichloropropene	< 0.5	19 (96 %R)	19 (94 %R) (3 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,1,2-Trichloroethane	< 1	22 (108 %R)	21 (107 %R) (1 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
2-Hexanone	< 10	23 (113 %R)	21 (106 %R) (7 RPD)	6/27/2020	ug/L	40 - 160	20	8260C
Tetrachloroethene	< 1	18 (92 %R)	18 (89 %R) (3 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,3-Dichloropropane	< 1	20 (99 %R)	19 (97 %R) (2 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Dibromochloromethane	< 1	16 (80 %R)	16 (78 %R) (2 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,2-Dibromoethane(EDB)	< 0.5	20 (101 %R)	20 (102 %R) (1 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Chlorobenzene	< 1	21 (105 %R)	20 (102 %R) (3 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,1,1,2-Tetrachloroethane	< 1	17 (84 %R)	17 (83 %R) (2 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Ethylbenzene	< 1	22 (110 %R)	21 (106 %R) (4 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
mp-Xylene	< 1	39 (98 %R)	38 (95 %R) (3 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
o-Xylene	< 1	21 (105 %R)	21 (103 %R) (2 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Styrene	< 1	21 (104 %R)	20 (101 %R) (3 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Bromoform	< 2	* 14 (68 %R)	* 14 (68 %R) (0 RPD)	6/27/2020	ug/L	70 - 130	20	8260C

QC REPORT

EAI ID#: **211876**

Client: **LE Environmental LLC**

Batch ID: 637292-11728/A062620vVT821

Client Designation: **Pigeon Property | 19-138**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
IsoPropylbenzene	< 1	24 (118 %R)	23 (114 %R) (3 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Bromobenzene	< 1	19 (94 %R)	18 (89 %R) (5 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,1,2,2-Tetrachloroethane	< 1	22 (111 %R)	20 (101 %R) (10 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,2,3-Trichloropropane	< 0.5	23 (117 %R)	22 (111 %R) (5 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
n-Propylbenzene	< 1	22 (111 %R)	22 (108 %R) (3 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
2-Chlorotoluene	< 1	21 (105 %R)	20 (102 %R) (4 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
4-Chlorotoluene	< 1	22 (108 %R)	21 (104 %R) (4 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,3,5-Trimethylbenzene	< 1	22 (108 %R)	21 (103 %R) (5 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
tert-Butylbenzene	< 1	21 (107 %R)	20 (102 %R) (5 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,2,4-Trimethylbenzene	< 1	24 (118 %R)	23 (114 %R) (4 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
sec-Butylbenzene	< 1	22 (111 %R)	21 (106 %R) (4 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,3-Dichlorobenzene	< 1	20 (102 %R)	19 (97 %R) (5 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
p-Isopropyltoluene	< 1	22 (108 %R)	21 (103 %R) (5 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,4-Dichlorobenzene	< 1	19 (96 %R)	19 (94 %R) (3 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,2-Dichlorobenzene	< 1	20 (100 %R)	20 (98 %R) (2 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
n-Butylbenzene	< 1	24 (120 %R)	23 (114 %R) (5 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,2-Dibromo-3-chloropropane	< 0.2	16 (81 %R)	16 (79 %R) (2 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,2,4-Trichlorobenzene	< 1	22 (110 %R)	21 (103 %R) (7 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Hexachlorobutadiene	< 0.5	16 (81 %R)	16 (78 %R) (3 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
Naphthalene	< 0.5	25 (124 %R)	23 (114 %R) (8 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
1,2,3-Trichlorobenzene	< 0.5	21 (107 %R)	20 (98 %R) (8 RPD)	6/27/2020	ug/L	70 - 130	20	8260C
4-Bromofluorobenzene (surr)	93 %R	97 %R	94 %R	6/27/2020	% Rec	70 - 130	50	8260C
1,2-Dichlorobenzene-d4 (surr)	94 %R	98 %R	97 %R	6/27/2020	% Rec	70 - 130	50	8260C
Toluene-d8 (surr)	112 %R	106 %R	107 %R	6/27/2020	% Rec	70 - 130	50	8260C
1,2-Dichloroethane-d4 (surr)	102 %R	99 %R	97 %R	6/27/2020	% Rec	70 - 130	20	8260C

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
*/!Flagged analyte recoveries deviated from the QA/QC limits. Unless noted on the sample page, flagged analytes that exceed acceptance limits in the Quality Control sample do not impact the data.

LABORATORY REPORT

EAI ID#: **211876**

Client: **LE Environmental LLC**

Client Designation: **Pigeon Property | 19-138**

Sample ID:	DWS-1
Lab Sample ID:	211876.01
Matrix:	aqueous
Date Sampled:	6/17/20
Date Received:	6/19/20
Units:	ug/L
Date of Analysis:	6/25/20
Analyst:	AM
Method:	524.2
Dilution Factor:	1

Dichlorodifluoromethane	< 0.5
Chloromethane	< 0.5
Vinyl chloride	< 0.5
Bromomethane	< 0.5
Chloroethane	< 0.5
Trichlorofluoromethane	< 0.5
Diethyl Ether	< 5
Acetone	< 10
1,1-Dichloroethene	< 0.5
tert-Butyl Alcohol (TBA)	< 30
Methylene chloride	< 0.5
Carbon disulfide	< 2
Methyl-t-butyl ether(MTBE)	< 0.5
Ethyl-t-butyl ether(ETBE)	< 0.5
Isopropyl ether(DIPE)	< 0.5
tert-amyl methyl ether(TAME)	< 0.5
trans-1,2-Dichloroethene	< 0.5
1,1-Dichloroethane	< 0.5
2,2-Dichloropropane	< 0.5
cis-1,2-Dichloroethene	< 0.5
2-Butanone(MEK)	< 5
Bromochloromethane	< 0.5
Tetrahydrofuran(THF)	< 5
Chloroform	< 0.5
1,1,1-Trichloroethane	< 0.5
Carbon tetrachloride	< 0.5
1,1-Dichloropropene	< 0.5
Benzene	< 0.5
1,2-Dichloroethane	< 0.5
Trichloroethene	< 0.5
1,2-Dichloropropane	< 0.5
Dibromomethane	< 0.5
Bromodichloromethane	< 0.5
4-Methyl-2-pentanone(MIBK)	< 5
cis-1,3-Dichloropropene	< 0.3
Toluene	< 0.5
trans-1,3-Dichloropropene	< 0.3
1,1,2-Trichloroethane	< 0.5
2-Hexanone	< 5
Tetrachloroethene	< 0.5
1,3-Dichloropropane	< 0.5
Dibromochloromethane	< 0.5
1,2-Dibromoethane(EDB)	< 0.5
Chlorobenzene	< 0.5
1,1,1,2-Tetrachloroethane	< 0.5
Ethylbenzene	< 0.5
mp-Xylene	< 0.5

LABORATORY REPORT

EAI ID#: **211876**

Client: **LE Environmental LLC**

Client Designation: **Pigeon Property | 19-138**

Sample ID:	DWS-1
Lab Sample ID:	211876.01
Matrix:	aqueous
Date Sampled:	6/17/20
Date Received:	6/19/20
Units:	ug/L
Date of Analysis:	6/25/20
Analyst:	AM
Method:	524.2
Dilution Factor:	1
o-Xylene	< 0.5
Styrene	< 0.5
Bromoform	< 0.5
IsoPropylbenzene	< 0.5
Bromobenzene	< 0.5
1,1,2,2-Tetrachloroethane	< 0.5
1,2,3-Trichloropropane	< 0.5
n-Propylbenzene	< 0.5
2-Chlorotoluene	< 0.5
4-Chlorotoluene	< 0.5
1,3,5-Trimethylbenzene	< 0.5
tert-Butylbenzene	< 0.5
1,2,4-Trimethylbenzene	< 0.5
sec-Butylbenzene	< 0.5
1,3-Dichlorobenzene	< 0.5
p-Isopropyltoluene	< 0.5
1,4-Dichlorobenzene	< 0.5
1,2-Dichlorobenzene	< 0.5
n-Butylbenzene	< 0.5
1,2-Dibromo-3-chloropropane	< 0.5
1,3,5-Trichlorobenzene	< 0.5
1,2,4-Trichlorobenzene	< 0.5
Hexachlorobutadiene	< 0.5
Naphthalene	< 0.5
1,2,3-Trichlorobenzene	< 0.5
4-Bromofluorobenzene (surr)	**103 %R**
1,2-Dichlorobenzene-d4 (surr)	**106 %R**

QC REPORT

EAI ID#: **211876**

Client: **LE Environmental LLC**

Batch ID: 637286-83805/A062520V5241

Client Designation: **Pigeon Property | 19-138**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
Dichlorodifluoromethane	< 0.5	* 14 (143 %R)	* 14 (137 %R) (4 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Chloromethane	< 0.5	13 (129 %R)	12 (117 %R) (10 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Vinyl chloride	< 0.5	12 (120 %R)	12 (116 %R) (3 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Bromomethane	< 0.5	11 (109 %R)	11 (105 %R) (4 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Chloroethane	< 0.5	11 (111 %R)	11 (110 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Trichlorofluoromethane	< 0.5	11 (106 %R)	10 (103 %R) (3 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Diethyl Ether	< 5	11 (108 %R)	11 (109 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Acetone	< 10	11 (108 %R)	11 (109 %R) (0 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,1-Dichloroethene	< 0.5	11 (107 %R)	10 (101 %R) (5 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
tert-Butyl Alcohol (TBA)	< 30	55 (111 %R)	57 (115 %R) (4 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Methylene chloride	< 0.5	11 (107 %R)	11 (107 %R) (0 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Carbon disulfide	< 2	13 (128 %R)	12 (123 %R) (4 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Methyl-t-butyl ether(MTBE)	< 0.5	11 (113 %R)	11 (114 %R) (0 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Ethyl-t-butyl ether(ETBE)	< 0.5	10 (103 %R)	10 (103 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Isopropyl ether(DIPE)	< 0.5	11 (107 %R)	11 (107 %R) (0 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
tert-amyl methyl ether(TAME)	< 0.5	12 (117 %R)	12 (116 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
trans-1,2-Dichloroethene	< 0.5	11 (111 %R)	11 (108 %R) (3 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,1-Dichloroethane	< 0.5	11 (113 %R)	11 (111 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
2,2-Dichloropropane	< 0.5	13 (125 %R)	12 (120 %R) (4 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
cis-1,2-Dichloroethene	< 0.5	11 (113 %R)	11 (111 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
2-Butanone(MEK)	< 5	11 (111 %R)	11 (109 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Bromochloromethane	< 0.5	11 (107 %R)	11 (107 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Tetrahydrofuran(THF)	< 5	12 (115 %R)	11 (114 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Chloroform	< 0.5	11 (108 %R)	11 (106 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,1,1-Trichloroethane	< 0.5	13 (126 %R)	12 (120 %R) (5 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Carbon tetrachloride	< 0.5	12 (116 %R)	11 (111 %R) (4 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,1-Dichloropropene	< 0.5	11 (112 %R)	11 (106 %R) (5 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Benzene	< 0.5	11 (107 %R)	10 (105 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,2-Dichloroethane	< 0.5	11 (105 %R)	10 (104 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Trichloroethene	< 0.5	11 (112 %R)	11 (110 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,2-Dichloropropane	< 0.5	11 (108 %R)	11 (105 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Dibromomethane	< 0.5	9.8 (98 %R)	10 (100 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Bromodichloromethane	< 0.5	11 (113 %R)	11 (112 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
4-Methyl-2-pentanone(MIBK)	< 5	11 (109 %R)	11 (111 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
cis-1,3-Dichloropropene	< 0.3	11 (114 %R)	11 (112 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Toluene	< 0.5	11 (109 %R)	11 (106 %R) (3 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
trans-1,3-Dichloropropene	< 0.3	12 (120 %R)	12 (119 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,1,2-Trichloroethane	< 0.5	11 (111 %R)	11 (111 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
2-Hexanone	< 5	11 (113 %R)	11 (112 %R) (0 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Tetrachloroethene	< 0.5	11 (112 %R)	11 (109 %R) (3 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,3-Dichloropropane	< 0.5	10 (104 %R)	10 (103 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Dibromochloromethane	< 0.5	11 (110 %R)	11 (108 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,2-Dibromoethane(EDB)	< 0.5	11 (107 %R)	11 (106 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Chlorobenzene	< 0.5	11 (110 %R)	11 (108 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,1,1,2-Tetrachloroethane	< 0.5	11 (109 %R)	11 (107 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Ethylbenzene	< 0.5	12 (115 %R)	11 (112 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2

QC REPORT

EAI ID#: **211876**

Client: **LE Environmental LLC**

Batch ID: 637286-83805/A062520V5241

Client Designation: **Pigeon Property | 19-138**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
mp-Xylene	< 0.5	22 (110 %R)	21 (107 %R) (3 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
o-Xylene	< 0.5	11 (108 %R)	11 (106 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Styrene	< 0.5	11 (109 %R)	11 (109 %R) (0 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Bromoform	< 0.5	12 (120 %R)	12 (121 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
IsoPropylbenzene	< 0.5	12 (120 %R)	12 (117 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Bromobenzene	< 0.5	10 (101 %R)	9.9 (99 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,1,2,2-Tetrachloroethane	< 0.5	10 (105 %R)	10 (104 %R) (0 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,2,3-Trichloropropane	< 0.5	11 (111 %R)	11 (114 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
n-Propylbenzene	< 0.5	11 (110 %R)	11 (107 %R) (3 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
2-Chlorotoluene	< 0.5	11 (109 %R)	11 (107 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
4-Chlorotoluene	< 0.5	11 (108 %R)	11 (105 %R) (3 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,3,5-Trimethylbenzene	< 0.5	11 (108 %R)	11 (106 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
tert-Butylbenzene	< 0.5	11 (115 %R)	11 (112 %R) (3 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,2,4-Trimethylbenzene	< 0.5	11 (110 %R)	11 (108 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
sec-Butylbenzene	< 0.5	11 (114 %R)	11 (110 %R) (4 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,3-Dichlorobenzene	< 0.5	11 (109 %R)	11 (107 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
p-Isopropyltoluene	< 0.5	11 (114 %R)	11 (110 %R) (4 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,4-Dichlorobenzene	< 0.5	11 (107 %R)	11 (106 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,2-Dichlorobenzene	< 0.5	11 (109 %R)	11 (107 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
n-Butylbenzene	< 0.5	11 (111 %R)	11 (106 %R) (5 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,2-Dibromo-3-chloropropane	< 0.5	11 (113 %R)	11 (112 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,3,5-Trichlorobenzene	< 0.5	11 (113 %R)	11 (109 %R) (3 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,2,4-Trichlorobenzene	< 0.5	11 (112 %R)	11 (109 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Hexachlorobutadiene	< 0.5	10 (102 %R)	9.7 (97 %R) (5 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
Naphthalene	< 0.5	11 (110 %R)	11 (109 %R) (1 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
1,2,3-Trichlorobenzene	< 0.5	11 (109 %R)	11 (108 %R) (2 RPD)	6/25/2020	ug/L	70 - 130	30	524.2
4-Bromofluorobenzene (surr)	104 %R	107 %R	108 %R	6/25/2020	% Rec	70 - 130		524.2
1,2-Dichlorobenzene-d4 (surr)	105 %R	106 %R	107 %R	6/25/2020	% Rec	70 - 130		524.2

Samples were extracted and analyzed within holding time limits.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
Sample surrogate recoveries met the above stated criteria.
The associated matrix spikes and/or Laboratory Control Samples met acceptance criteria.
There were no exceptions in the analyses, unless noted.
*/!Flagged analyte recoveries deviated from the QA/QC limits. Unless noted on the sample page, flagged analytes that exceed acceptance limits in the Quality Control sample do not impact the data.

LABORATORY REPORT

EAI ID#: **211876**

Client: **LE Environmental LLC**

Client Designation: **Pigeon Property | 19-138**

Sample ID:	MW-2	MW-1	Duplicate	MW-4					
Lab Sample ID:	211876.02	211876.03	211876.04	211876.06					
Matrix:	aqueous	aqueous	aqueous	aqueous					
Date Sampled:	6/17/20	6/17/20	6/17/20	6/17/20	**Analytical Matrix**	**Units**	**Date of Analysis**	**Method**	**Analyst**
Date Received:	6/19/20	6/19/20	6/19/20	6/19/20					
Arsenic	**0.0057**	**0.017**	**0.017**	**0.0031**	AqTot	mg/L	6/23/20	6020	DS
Barium	**0.71**	**1.6**	**1.6**	**0.46**	AqTot	mg/L	6/23/20	6020	DS
Cadmium	**0.0019**	**0.0012**	**0.0012**	**0.0012**	AqTot	mg/L	6/23/20	6020	DS
Chromium	< 0.001	**0.022**	**0.024**	**0.0019**	AqTot	mg/L	6/23/20	6020	DS
Lead	**0.0011**	**0.12**	**0.12**	**0.0057**	AqTot	mg/L	6/23/20	6020	DS
Mercury	< 0.0001	< 0.0001	< 0.0001	< 0.0001	AqTot	mg/L	6/23/20	6020	DS
Selenium	< 0.001	**0.0047**	**0.0034**	< 0.001	AqTot	mg/L	6/23/20	6020	DS
Silver	< 0.001	< 0.001	< 0.001	< 0.001	AqTot	mg/L	6/23/20	6020	DS

Per client request, samples were decanted from preserved containers prior to digestion.

MW-1 and Duplicate may have elevated Selenium concentrations due to matrix interference.

QC REPORT

EAI ID#: **211876**

Client: **LE Environmental LLC**

Client Designation: **Pigeon Property | 19-138**

Parameter Name	Blank	LCS	LCSD		Units	Date of Analysis	Limits	RPD	Method
Arsenic	< 0.001	1.0 (100 %R)		NA	mg/L	6/23/20	80 - 120	20	6020
Barium	< 0.001	1.1 (107 %R)		NA	mg/L	6/23/20	80 - 120	20	6020
Cadmium	< 0.001	1.0 (101 %R)		NA	mg/L	6/23/20	80 - 120	20	6020
Chromium	< 0.001	0.99 (99 %R)		NA	mg/L	6/23/20	80 - 120	20	6020
Lead	< 0.001	1.0 (103 %R)		NA	mg/L	6/23/20	80 - 120	20	6020
Mercury	< 0.0001	0.0011 (107 %R)		NA	mg/L	6/23/20	80 - 120	20	6020
Selenium	< 0.001	1.0 (100 %R)		NA	mg/L	6/23/20	80 - 120	20	6020
Silver	< 0.001	0.011 (109 %R)		NA	mg/L	6/23/20	80 - 120	20	6020

Samples were analyzed within holding times unless noted on the sample results page.
Instrumentation was calibrated in accordance with the method requirements.
The method blanks were free of contamination at the reporting limits.
The associated matrix spikes and/or Laboratory Control Samples met the above stated criteria.
Exceptions to the above statements are flagged or noted above or on the QC Narrative page.
*/! Flagged analyte recoveries deviated from the QA/QC limits.

Page 1 of 1

CHAIN-OF-CUSTODY RECORD

211876

BOLD FIELDS REQUIRED. PLEASE CIRCLE REQUESTED ANALYSIS.

SAMPLE I.D.	SAMPLING DATE/TIME *IF COMPOSITE, INDICATE BOTH START & FINISH DATE/TIME	MATRIX (SEE BELOW)	GRAB/*COMPOSITE	VOC: 5242 BTEX 524.2 MTBE ONLY	VOC: 524.2 BTEX 8260 624 VTICS 1, 4 DIOXANE	VOC: 8021 BTEX HALOS	VOC: 8015 GRO MAVPH	SVOC: 8270 625 SVTICS EDB DBCP ABN A BN PAH	SVOC: TPH8100 L1 L2	SVOC: 8015 DRO MAEPH	SVOC: PEST 608 PCB 608 PEST 8081 PCB 8082	SVOC: OIL & GREASE 1664 TPH 1664	TCLP: TCLP 1311 ABN METALS VOC PEST HERB	METALS: DISSOLVED METALS (LIST BELOW)	METALS: TOTAL METALS (LIST BELOW)	INORGANICS: TS TSS TDS SPEC. CON.	INORGANICS: BR CL F SO4 NO2 NO3 NO2NO3	INORGANICS: BOD CBOD T. ALK.	INORGANICS: TKN NH3 T. PHOS. O. PHOS.	INORGANICS: PH T. RES. CHLORINE	INORGANICS: COD PHENOLS TOC DOC	INORGANICS: TOTAL CYANIDE TOTAL SULFIDE	INORGANICS: REACTIVE CYANIDE REACTIVE SULFIDE FLASHPOINT IGNITABILITY	MICRO: TOTAL COLIFORM E. COLI FECAL COLIFORM	MICRO: ENTEROCOCCI HETEROTROPHIC PLATE COUNT	OTHER	OTHER	OTHER	# OF CONTAINERS	NOTES MEOH VIAL #
DWS-1	6/17/20; 0840	DW	G	X																										3	
MW-2	6/17/20; 1010	GW	G		X										X															5	
MW-1	6/17/20; 1030	GW	G		X										X															5	
Duplicate	6/17/20; 1030	GW	G		X										X															5	
MW-3	6/17/20; 1150	GW	G		X																									2	
MW-4	6/17/20; 1225	GW	G		X										X															3	
MW-5	6/17/20; 1235	GW	G		X																									3	
TripBlank	5/26/20; 1500	GW	G		X																									3	

MATRIX: A-AIR; S-SOIL; GW-GROUND WATER; SW-SURFACE WATER; DW-DRINKING WATER; WW-WASTE WATER

PRESERVATIVE: H-HCL; N-HNO_3; S-H_2SO_4; Na-NaOH; M-MEOH

PROJECT MANAGER: Angela Emerson

COMPANY: LE Environmental LLC

ADDRESS: 21 N Main St Unit #1

CITY: Waterbury STATE: VT ZIP: 05676

PHONE: 802-917-2001 EXT.:

FAX: —

E-MAIL: Angela@leenv.net

SITE NAME: Pigeon Property

PROJECT #: 19-138

STATE: NH MA ME (VT) OTHER:

REGULATORY PROGRAM: NPDES: RGP POTW STORMWATER OR GWP, OIL FUND, (BROWNFIELD) OR OTHER:

QUOTE #: PO #:

DATE NEEDED: Normal TAT

QA/QC REPORTING LEVEL: A B C OR MA MCP

REPORTING OPTIONS: PRELIMS: YES OR NO

ELECTRONIC OPTIONS: E-MAIL PDF EQUIS EXCEL

TEMP. 6°C °C

ICE? (YES) NO

SAMPLER(S): Angela Emerson

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
Angela Emerson	6/19/20		
	6/19/20	12:40	
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:
	6/19/20	15:20	
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:

METALS: (8 RCRA) 13 PP FE, MN PB, CU

OTHER METALS:

SAMPLES FIELD FILTERED? ☐ YES ☒ NO

NOTES: (IE: SPECIAL DETECTION LIMITS, BILLING INFO, IF DIFFERENT)

*Please decant metals Samples prior to running
*Low sample volume due to poor recharge

SITE HISTORY:

SUSPECTED CONTAMINATION:

FIELD READINGS:

Eastern Analytical, Inc.
professional laboratory and drilling services
25 CHENELL DRIVE | CONCORD, NH 03301 | TEL: 603.228.0525 | 1.800.287.0525 | E-MAIL: CUSTOMERSERVICE@EASTERNANALYTICAL.COM | WWW.EASTERNANALYTICAL.COM

(WHITE: ORIGINAL GREEN: PROJECT MANAGER)

Appendix F

Data Validation Report

LE·Environmental

21 North Main Street • Waterbury, Vermont 05676
Phone: (802) 917-2001 • www.leenv.net

Data Validation Report
Pigeon Property
1705 Route 129
Westford, Vermont
July 23, 2020

Sampling Summary

The project scope included collection of nine soil samples, five groundwater samples, and one drinking water sample from the Site. Quality Assurance samples included two duplicate soil samples and two trip blanks, and a duplicate groundwater sample and trip blank.

Sampling Procedures and Protocols

Sampling was performed in accordance with the procedures specified in the SSQAPP addenda dated February 25, 2020 except for the following field changes:

- A soil sample was not collected from soil boring SB-3, because the soil boring was installed in the same location at the former gasoline UST, and a soil sample and duplicate were obtained from this location during the UST removal.
- Additional soil samples were obtained from soil boring SB-2 and SB-4, because contamination was noted both at the surface and at deeper depths.
- The soil sample collected from SB-5 could not be obtained from the zone with the highest PID reading due to poor sample recovery. The laboratory sample was instead collected from next sampling run.
- A PCB sample was obtained from soil boring SB-1 in order to get a background PCB level in the event that PCBs were found around the garage.
- The lack of recharge in the groundwater monitoring wells prohibited the collection of metals samples at MW-3 and MW-5.

Field data sheets and the field notebooks were reviewed to ensure proper documentation of the sampling conditions. All entries were made with permanent ink. Entries included the identity of the sampler, sampling location, time, and date. All entries and equipment used were recorded on the daily work report.

The chain of custody forms were reviewed to ensure the sample identification, number, type and size of sample containers, preservatives used; and signatures were properly recorded and were in accordance with the SSQAPP addenda.

The laboratory cover sheets, sample acceptance forms and case narratives were reviewed. All samples adhered to the laboratories' acceptance policies. All samples were analyzed in

accordance with laboratory SOPs. No deviations from laboratory protocols were noted on the laboratory cover sheets except for the following:

1. Groundwater samples were allowed to settle and then were decanted for analysis, due to sediment in the samples.
2. The laboratory noted that there was possible carry over of contamination from the duplicate groundwater sample to the MW-5 sample. This could not be resolved at the laboratory due to insufficient groundwater recharge leading to less sample submitted than needed for this resolution.

All samples arrived at the laboratories under chain-of-custody procedures and at appropriate temperature and sample condition, and all analyses were performed within the EPA Method specified holding times.

Trip and Laboratory Blanks

A methanol trip blank was submitted with the soil samples and an aqueous trip blank was submitted with the groundwater samples. The trip blanks were brought into the field and handled with the other samples obtained during the assessment. No contaminants were detected in the blanks, which indicates there was no contamination of samples resulting from handling in the field or while in transit. The laboratories prepared method blanks for all analyses performed and reported no detection of compounds.

MS/MSD and LCS/LCSD

The laboratory noted several deviations from QA limits in the matrix spike/matrix spike duplicate (MS/MSD) and laboratory control samples/laboratory control sample duplicate (LCS/LCSD) analyses. These deviations were high bias exceedences of QA limits, and did not affect the overall usability of the data and findings.

RPD

RPD values were calculated for the field duplicates and corresponding samples.

- A soil sample (UST-1) and duplicate soil sample collected on June 2, 2020. All RPDs were within the 50% allowable range.
- A soil sample (SB-5) and duplicate soil sample collected on June 5, 2020. All RPDs were within the 50% allowable range.
- A groundwater sample (MW-1) and duplicate groundwater sample collected on June 17, 2020 were analyzed. RPD values were within the 30% allowable range.

Surrogate Recovery

Surrogate recovery analyses performed by the laboratories are within acceptable ranges with the following noted exceptions.

- Surrogates 4-Bromofluorobenzene and 1,2-Dichloroethane-d4 demonstrated recovery outside of the acceptance control limits due to non target sample matrix interference for the soil samples collected on June 2, 2020.
- Surrogates 4-Bromofluorobenzene and 1,2-Dichloroethane-d4 demonstrated recovery outside of the acceptance control limits due to non target sample matrix interference in UST-1 and duplicate

Reporting Limits

Laboratory reporting limits were compared with applicable regulatory criteria for each tested compound as published in the Department of Environmental Conservation Investigation and Remediation of Contaminated Properties Rule. All laboratory reporting limits were below the residential regulatory threshold criteria those previously noted in the SSQAPP form K, except for the groundwater samples obtained from MW-1 and the duplicate. The high concentrations of VOCs in these samples led to dilution and elevated reporting limits. Additionally, the concentrations of Selenium in MW-1 and the groundwater duplicate sample may be elevated due to matrix interference. Reported concentrations were well below VGES.

Conclusion

Based on the findings presented above, all data should be accepted without condition except for the groundwater sample collected from MW-5. The laboratory note about possible carryover implies the concentrations may or may not be attributable to this sample. It is recommended that the MW-5 data be used as presented for the current assessment and that additional sampling be performed to confirm that these compounds are present at that location. Other deviations noted do not affect the overall findings of this assessment.

Respectfully Submitted,

Alan Liptak, EP
Project Quality Assurance Officer

Data Validation Summary Table
Soil Samples
1705 Route 128, Westford, Vermont
LEE #19-138

LEE Environmental

Sample Name	UST-1	Dup UST-1	Trip Blank	SB-1	SB-2S	SB-2D	SB-4S	SB-4D	SB-5	SB-6	SB-7	Dup SB-5	Trip Blank
Lab sample number	211268.01	211268.02	211268.03	211572.01	211572.02	211572.03	211572.04	211572.05	211572.06	211572.07	211572.08	211572.09	211572.1
Date Sampled	6/2/20	6/2/20	6/2/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20	6/5/20
Date of Analysis	6/9-6/15/20 (VOCs); 6/8-6/15/20 (PAHs); 6/16/20 (PCBs); 6/8-6/16/20 (metals); 6/8/20 (TPH)												
Sample Type	Soil	Soil	Methanol	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Methanol
Was analysis completed within EPA Method specified holding time?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Were the samples properly handled under COC guidelines?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Were the samples properly chilled? (0-6 degrees C)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Were any compounds detected in blanks?	N	N	N	N	N	N	N	N	N	N	N	N	N
Were the samples properly labeled?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Relative Percent Difference (RPD) acceptable? (<=50% RPD)	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A	Y	N/A	N/A	Y	N/A
Were laboratory surrogate recovery concentrations acceptable?	Y(1)	Y(1)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Were laboratory control samples and duplicates acceptable?	Y(2)	Y(2)	Y(2)	Y(4,5)	Y(4,5)	Y(4,5)	Y(4,5)	Y(4,5)	Y(4,5)	Y(4,5)	Y(4,5)	Y(4,5)	Y(4,5)
Reporting limits meet Form K values	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Are reporting limits below applicable standards?	Y(3)	Y(3)	Y(3)	Y(3)	Y(3)	Y(3)	Y(3)	Y(3)	Y(3)	Y(3)	Y(3)	Y(3)	Y(3)

Notes:
Y=Yes, N=No, N/A=Not applicable to sample
Y(1)=Surrogates 4-Bromofluorobenzene and 1,2-Dichloroethane-d4 demonstrated recovery outside of the acceptance control limits due to non target sample matrix interference
Y(2)= Yes, except IsoPropylbenzene, 1,3,5-TMB, 1,2,4-TMB, sec-Butylbenzene, p-Isopropyltoluene exhibited recovery outside the acceptance limits in the quality control sample. The analytes were detected in the samples.
Y(3) = yes except as noted in Form K
Y(4) = Bromomethane exhibited recovery outside acceptance limits in the quality control sample. The analyte was not detected in the samples.
Y(5) = Isopropylbenzene and 2,2-dichloropropane exhibited recovery outside acceptance limits in the quality control sample. The analytes were detected in the sample.

Relative Percent Difference Calculations
Soil Samples
1705 Route 128, Westford, Vermont

Soil Sample	*UST-1*	*Duplicate*	*Relative*	*SB-5*	*Duplicate*	*Relative*
Sample Depth (ft.)	*6*		*Percent*	*9-10*		*Percent*
PID reading (ppm)	*1,644*		*Difference*	*2.7*		*Difference*
Sample Date	*6/2/20*		*(%)*	*6/5/20*		*(%)*
VOCs, EPA Method 8260C (mg/kg)						
Dichlorodifluoromethane	ND<0.1	ND<0.1	-	ND<0.1	ND<0.1	-
Chloromethane	ND<0.1	ND<0.1	-	ND<0.1	ND<0.1	-
Vinyl Chloride	ND<0.03	ND<0.02	-	ND<0.02	ND<0.03	-
Bromomethane	ND<0.2	ND<0.2	-	ND<0.1	ND<0.1	-
Chloroethane	ND<0.1	ND<0.1	-	ND<0.1	ND<0.1	-
Trichlorofluoromethane	ND<0.1	ND<0.1	-	ND<0.1	ND<0.1	-
Diethyl Ether	ND<0.06	ND<0.06	-	ND<0.06	ND<0.7	-
Acetone	ND<3	ND<2	-	ND<2	ND<3	-
1 ,1-Dichloroethene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
Methylene chloride	ND<0.1	ND<0.1	-	ND<0.1	ND<0.1	-
Carbon disulfide	ND<0.1	ND<0.1	-	ND<0.1	ND<0.1	-
MTBE	ND<0.1	ND<0.1	-	ND<0.1	ND<0.1	-
trans-1,2-Dichloroethene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
1,1-Dichloroethane	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
2,2-Dichloropropane	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
cis-1,2-Dichloroethene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
2-Butanone(MEK)	ND<0.6	ND<0.6	-	ND<0.6	ND<0.7	-
Bromochloromethane	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
Tetrahydrofuran(THF)	ND<0.6	ND<0.6	-	ND<0.6	ND<0.7	-
Chloroform	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
1,1,1-Trichloroethane	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
Carbon tetrachloride	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
1 ,1-Dichloropropene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
Benzene	**43**	**32**	15	ND<0.06	ND<0.07	-
1,2-Dichloroethane	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
Trichloroethene (TCE)	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
1,2-Dichloropropane	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
Dibromomethane	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
Bromodichloromethane	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
4-Methyl-2-pentanone(MIBK)	ND<0.6	ND<0.6	-	ND<0.6	ND<0.7	-
cis-1,3-Dichloropropene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
Toluene	**610**	**520**	-	ND<0.06	ND<0.07	-
trans-1,3-Dichloropropene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-

Relative Percent Difference Calculations
Soil Samples
1705 Route 128, Westford, Vermont

Soil Sample	*UST-1*	*Duplicate*	*Relative*	*SB-5*	*Duplicate*	*Relative*
Sample Depth (ft.)	*6*		*Percent*	*9-10*		*Percent*
PID reading (ppm)	*1,644*		*Difference*	*2.7*		*Difference*
Sample Date	*6/2/20*		*(%)*	*6/5/20*		*(%)*
VOCs, EPA Method 8260C (mg/kg)						
1,1,2-Trichloroethane	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
2-Hexanone	ND<0.1	ND<0.1	-	ND<0.1	ND<0.1	-
Tetrachloroethene (PCE)	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
1,3-Dichloropropane	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
Dibromochloromethane	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
1,2-Dibromoethane(EDB)	ND<0.03	ND<0.02	-	ND<0.02	ND<0.03	-
Chlorobenzene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
1,1,1,2-Tetrachloroethane	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
Ethylbenzene	**150**	**120**	11	ND<0.06	ND<0.07	-
mp-Xylene	**700**	**620**	6	ND<0.06	ND<0.07	-
o-Xylene	**280**	**250**	6	ND<0.06	ND<0.07	-
Styrene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
Bromoform	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
IsoPropylbenzene	**14**	**16**	7	ND<0.06	ND<0.07	-
Bromobenzene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
1,1,2,2-Tetrachloroethane	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
1,2,3-Trichloropropane	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
n-Propylbenzene	**46**	**37**	11	ND<0.06	ND<0.07	-
2-Chlorotoluene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
4-Chlorotoluene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
1,3,5-trimethylbenzene	**86**	**70**	10	ND<0.06	ND<0.07	-
tert-Butylbenzene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
1,2,4-trimethylbenzene	**340**	**330**	1	ND<0.06	ND<0.07	-
sec-Butylbenzene	**4.7**	**4.8**	1	**0.13**	ND<0.07	-
1,3-Dichlorobenzene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
p-Isopropyltoluene	**2.6**	**2.7**	2	**0.098**	ND<0.07	-
1,4-Dichlorobenzene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
1,2-Dichlorobenzene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
n-Butylbenzene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
1,2-Dibromo-3-chloropropane	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
1,2,4-Trichlorobenzene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
Hexachlorobutadiene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-
Naphthalene	**54**	**43**	11	ND<0.1	ND<0.01	-
1,2,3-Trichlorobenzene	ND<0.06	ND<0.06	-	ND<0.06	ND<0.07	-

Relative Percent Difference Calculations
Soil Samples
1705 Route 128, Westford, Vermont

Soil Sample	*UST-1*	*Duplicate*	*Relative*	*SB-5*	*Duplicate*	*Relative*
Sample Depth (ft.)	*6*		*Percent*	*9-10*		*Percent*
PID reading (ppm)	*1,644*		*Difference*	*2.7*		*Difference*
Sample Date	*6/2/20*		*(%)*	*6/5/20*		*(%)*
PAH EPA Method 8270 (mg/kg)						
Naphthalene	**3.5**	**3.4**	1	ND<0.009	ND<0.009	-
2-Methylnaphthalene	**2.6**	**2.5**	2	ND<0.009	ND<0.009	-
1-Methylnaphthalene	**1.2**	**1.2**	0	ND<0.009	ND<0.009	-
Acenaphthylene	**0.042**	**0.036**	8	ND<0.009	ND<0.009	-
Acenaphthene	**0.011**	**0.010**	5	ND<0.009	ND<0.009	-
Fluorene	**0.028**	**0.026**	4	ND<0.009	ND<0.009	-
Phenanthrene	**0.066**	**0.061**	4	ND<0.009	ND<0.009	-
Anthracene	**0.016**	**0.015**	3	ND<0.009	ND<0.009	-
Fluoranthene	**0.079**	**0.079**	0	**0.0090**	**0.011**	10
Pyrene	**0.082**	**0.084**	1	ND<0.009	ND<0.009	-
Benzo(a)anthracene	**0.041**	**0.041**	0	ND<0.009	ND<0.009	-
Chrysene	**0.047**	**0.046**	1	ND<0.009	ND<0.009	-
Benzo(b)fluoranthene	**0.087**	**0.083**	2	ND<0.009	ND<0.009	-
Benzo(k)fluoranthene	**0.033**	**0.031**	3	ND<0.009	ND<0.009	-
Benzo(a)pyrene	**0.067**	**0.064**	2	ND<0.009	ND<0.009	-
Indeno(1,2,3-cd)pyrene	**0.066**	**0.059**	6	ND<0.009	ND<0.009	-
Dibenz(a,h)anthracene	**0.013**	**0.012**	4	ND<0.009	ND<0.009	-
Benzo(g,h,i)perylene	**0.068**	**0.061**	5	ND<0.009	ND<0.009	-

Soil Sample	*UST-1*	*Duplicate*	Relative	*SB-5*	*Duplicate*	*Relative*
Sample Depth (ft.)	*6*		Percent	*9-10*		*Percent*
PID reading (ppm)	*1,644*		Difference	*2.7*		*Difference*
Sample Date	*6/2/20*		(%)	*6/5/20*		*(%)*
TOTAL METALS, EPA Method 6020 (mg/kg, dry)						
Total Arsenic	**8.4**	**6.9**	10	**6.4**	**6.9**	4
Total Barium	**130**	**140**	4	**140**	**140**	0
Total Cadmium	**0.56**	**0.52**	4	ND<0.5	ND<0.5	-
Total Chromium	**39**	**42**	4	**35**	**39**	5
Total Lead	**68**	**56**	10	**14**	**18**	13
Total Mercury	**0.11**	ND<0.1	-	ND<0.1	ND<0.1	-
Total Selenium	ND<0.5	ND<0.5	-	ND<0.5	ND<0.5	-
Total Silver	ND<0.5	ND<0.5	-	ND<0.5	ND<0.5	-

Data Validation Summary Table
Groundwater and Drinking Water Samples
1705 Route 128, Westford, Vermont
LEE #19-138

Sample Name	MW-1	MW-2	MW-3	MW-4	MW-5	Duplicate	Trip Blank	DWS-1
Lab sample number	211876.01	211876.02	211876.03	211876.04	211876.05	211876.06	211876.07	211876.01
Date Sampled	6/17/20	6/17/20	6/17/20	6/17/20	6/17/20	6/17/20	5/26/20	6/17/20
Date of Analysis	6/25/20 (VOCs); 6/23/20 (metals)							
Sample Type	GW	GW	GW	GW	GW	GW	DI Water	Drinking Water
Was analysis completed within EPA Method specified holding time?	Y	Y	Y	Y	Y	Y	Y	Y
Were the samples properly handled under COC guidelines?	Y	Y	Y	Y	Y	Y	Y	Y
Were the samples properly chilled? (0-6 degrees C)	Y	Y	Y	Y	Y	Y	Y	Y
Were any compounds detected in blanks?	N	N	N	N	N	N	N	N
Were the samples properly labeled?	Y	Y	Y	Y	Y	Y	Y	Y
Relative Percent Difference (RPD) acceptable? (<=30% RPD)	Y	N/A	N/A	N/A	N/A	Y	N/A	N/A
Were laboratory surrogate recovery concentrations acceptable?	Y	Y	Y	Y	Y	Y	Y	Y
Were laboratory control samples and duplicates acceptable?	Y (6)	Y (1)	Y (6)	Y (6)	Y(5)	Y (6)	Y	Y
Reporting limits meet Form K values	Y (2,4)	Y	Y	Y	Y	Y (2,4)	Y	Y
Are reporting limits below applicable standards?	Y (2,3.4)	Y(2)	Y(2)	Y(2)	Y(2)	Y (2,3,4)	Y(2)	Y(2)

Notes:

Y=Yes, N=No, N/A=Not applicable to sample; GW = groundwater;

Y(1) = the following compounds exhibited recovery outside of acceptance limits in the quality control sample: Acetone, n-Propylbenzene, 1,3,5-TMB, tert-Butylbenzene, 1,2,4-TMB, sec-Butylbenzene, Naphthalene

Y(2) = except as noted in Form K

Y(3) = Concentrations of Selenium may be elevated due to matrix interference. Reported concentrations were well below VGES

Y(4) = Several VOC reporting limits exceeded Form K values and applicable standards due to dilution, which was due to high concentrations of petroleum VOCs in the samples

Y(5) = Acetone, 1,2,4-TMB, Naphthalene exhibited recovery outside of acceptance limits in the quality control sample. Additionally, reported VOC concentrations may be the result of carryover from duplicate sample

Y(6) = Bromoform exhibited recovery outside acceptance limits in the quality control sample. The analyte was not detected in the samples.

Relative Percent Difference Calculations
Groundwater Samples
1705 Route 128, Westford, Vermont

Sample	*MW-1*	*Duplicate*	*Relative %*
Sample Date	*6/17/20*		*Difference*
VOCs, EPA Method 8260C (mg/kg)			
Dichlorodifluoromethane	ND<200	ND<200	-
Chloromethane	ND<200	ND<200	-
Vinyl Chloride	ND<100	ND<100	-
Bromomethane	ND<200	ND<200	-
Chloroethane	ND<200	ND<200	-
Trichlorofluoromethane	ND<200	ND<200	-
Diethyl Ether	ND<200	ND<200	-
Acetone	ND<1000	ND<1000	-
1 ,1-Dichloroethene	ND<50	ND<50	-
Methylene chloride	ND<100	ND<100	-
Carbon disulfide	ND<200	ND<200	-
MTBE	**2,100**	**2,100**	0
trans-1,2-Dichloroethene	ND<100	ND<100	-
1,1-Dichloroethane	ND<100	ND<100	-
2,2-Dichloropropane	ND<100	ND<100	-
cis-1,2-Dichloroethene	ND<100	ND<100	-
2-Butanone(MEK)	ND<1,000	ND<1,000	-
Bromochloromethane	ND<100	ND<100	-
Tetrahydrofuran(THF)	ND<1,000	ND<1,000	-
Chloroform	ND<100	ND<100	-
1,1,1-Trichloroethane	ND<100	ND<100	-
Carbon tetrachloride	ND<100	ND<100	-
1 ,1-Dichloropropene	ND<100	ND<100	-
Benzene	**14,000.**	**13,000.**	4
1,2-Dichloroethane	ND<100	ND<100	-
Trichloroethene (TCE)	ND<100	ND<100	-
1,2-Dichloropropane	ND<100	ND<100	-
Dibromomethane	ND<100	ND<100	-
Bromodichloromethane	ND<50	ND<50	-
4-Methyl-2-pentanone(MIBK)	ND<1,000	ND<1,000	-
cis-1,3-Dichloropropene	ND<50	ND<50	-
Toluene	**34,000**	**34,000**	0
trans-1,3-Dichloropropene	ND<50	ND<50	-

Relative Percent Difference Calculations
Groundwater Samples
1705 Route 128, Westford, Vermont

Soil Sample	*MW-1*	*Duplicate*	*Relative %*
Sample Date	*6/17/20*		*Difference*
VOCs, EPA Method 8260C (mg/kg)			
1,1,2-Trichloroethane	ND<100	ND<100	-
2-Hexanone	ND<1,000	ND<1,000	-
Tetrachloroethene (PCE)	ND<100	ND<100	-
1,3-Dichloropropane	ND<100	ND<100	-
Dibromochloromethane	ND<100	ND<100	-
1,2-Dibromoethane(EDB)	ND<50	ND<50	-
Chlorobenzene	ND<100	ND<100	-
1,1,1,2-Tetrachloroethane	ND<100	ND<100	-
Ethylbenzene	**3,900**	**4,000**	1
mp-Xylene	**13,000**	**14,000**	4
o-Xylene	**6,000**	**6,300**	2
Styrene	ND<100	ND<100	-
Bromoform	ND<200	ND<200	-
IsoPropylbenzene	**120**	**140**	8
Bromobenzene	ND<100	ND<100	-
1,1,2,2-Tetrachloroethane	ND<100	ND<100	-
1,2,3-Trichloropropane	ND<50	ND<50	-
n-Propylbenzene	**330**	**380**	7
2-Chlorotoluene	ND<100	ND<100	-
4-Chlorotoluene	ND<100	ND<100	-
1,3,5-trimethylbenzene	**770**	**890**	7
tert-Butylbenzene	ND<100	ND<100	-
1,2,4-trimethylbenzene	**2,900**	**3,200**	5
sec-Butylbenzene	ND<100	ND<100	-
1,3-Dichlorobenzene	ND<100	ND<100	-
p-Isopropyltoluene	ND<100	ND<100	-
1,4-Dichlorobenzene	ND<100	ND<100	-
1,2-Dichlorobenzene	ND<100	ND<100	-
n-Butylbenzene	ND<100	ND<100	-
1,2-Dibromo-3-chloropropane	ND<20	ND<20	-
1,3,5-Trichlorobenzene	ND<100	ND<100	-
1,2,4-Trichlorobenzene	ND<100	ND<100	-
Hexachlorobutadiene	ND<50	ND<50	-
Naphthalene	**640**	**690**	4
1,2,3-Trichlorobenzene	ND<50	ND<50	-

Relative Percent Difference Calculations
Groundwater Samples
1705 Route 128, Westford, Vermont

Soil Sample / *Sample Date*	*MW-1*	*Duplicate*	*Relative % Difference*
	6/17/20		
TOTAL METALS, EPA Method 6020 (mg/l)			
Total Arsenic	**0.017**	**0.017**	0
Total Barium	**1.6**	**1.6**	0
Total Cadmium	**0.0012**	**0.0012**	0
Total Chromium	**0.022**	**0.024**	4
Total Lead	**0.12**	**0.12**	0
Total Mercury	ND<0.0001	ND<0.0001	-
Total Selenium	**0.0047**	**0.0034**	16
Total Silver	ND<0.001	ND<0.001	-

Appendix G

Underground Storage Tank Removal Report

LE·Environmental

21 North Main Street • Waterbury, Vermont 05676
Phone: (802) 917-2001 • www.leenv.net

June 25, 2020

Sue Thayer
Department of Environmental Conservation
Waste Management and Prevention Division
Storage Tank Section
Davis Building - 1st Floor
One National Life Drive
Montpelier, VT 05620-3704

Re: UST Removal Report, Pigeon Property, 1705 Route 128, Westford, Vermont
Facility ID #5557263, SMS #2019-4863

Dear Ms. Thayer:

On June 2, 2020, LE Environmental LLC (LEE) conducted an environmental assessment of an abandoned, 1,100-gallon, gasoline underground storage tank (UST) at the referenced location (Site Location Map attached). LEE also collected soil samples from under the UST, pursuant to the approximately Brownfields Phase II Environmental Site Assessment (ESA) Site-Specific Quality Assurance Plan (SSQAPP).

The UST was a relic of the former gasoline filling station that operated on the Site from circa 1940 through the early 1980s. A geophysical investigation conducted in relation to the Brownfields Phase II ESA revealed the presence of a potential UST. LEE arranged for and oversaw the UST removal and sampling. US Ecology of Williston, Vermont performed the excavation, UST cleaning and removal, backfilling, and waste disposal.

The age of the UST and piping is not known, but it appeared to be at least 80 years old. The owner was not aware there were any USTs left in the ground, and he remembered tanks being removed from the Site sometime in the 1980s or 1990s. The UST was a single-walled tank, and piping from other former USTs was also encountered in the excavation. The piping for the removed UST appeared to have been cut near the former pump island, and had paper stuffed in the end. It was buried approximately 1.5' to 2' below grade, and was found to be in failed condition upon removal, with extensive rust, pitting, and several large holes in the bottom of the UST. The UST was cleaned in place. Approximately 330 gallons of gasoline and water was pumped from the UST, and one 55-gallon drums of sludge was recovered during the cleaning. The UST bottom was at 6' below grade. The excavation measured 20' wide, 10' long and 6' deep upon completion. Groundwater was encountered at 6' below grade, and a sheen was noted on the groundwater.

Eleven soil samples were collected for field screening of volatile vapors using a calibrated Mini-RAE Lite photoionization detector equipped with a 10.6 eV bulb (PID). Soils consisted of sand and silt fill overlaying native clay. The PID readings ranged from 17.1 parts per million (ppm) in soil under the former dispenser island to 2,374 ppm at the top of the tank

where piping (not attached to this tank) was found. PID readings ranging from 1,286 ppm to 1644 ppm were observed under the UST, which was also where groundwater was encountered. The sample locations are shown on the attached sketch.

Sample ID	Location	Depth	PID Reading
SS-1	Top of Tank	0.5 feet	705.4 ppm
SS-2	Top of Tank	1.5 feet	61.0 ppm
SS-3	Under Dispenser	1.5 feet	17.1 ppm
SS-4	Side of Tank	2.5 feet	926.2 ppm
SS-5	Top of Tank	1.5 feet	2,374 ppm
SS-6	Side of Tank	1.5 feet	212.4 ppm
SS-7	Side of Tank	2.5 feet	755.8 ppm
SS-8	Side of Tank	2.5 feet	1,440 ppm
SS-9*	Bottom of Tank	6 feet	1,644 ppm
SS-10	Bottom of Tank	6 feet	1,624 ppm
SS-11	Bottom of Tank	6 feet	1,286 ppm

The soil sample with an asterisk was submitted to Eastern Analytical Inc. of Concord, NH for analysis of VOCs, polycyclic aromatic hydrocarbons, and RCRA 8 metals as part of the Brownfields Phase II ESA. The lab results are attached to this letter.

While on site, LEE performed a review of potential sensitive receptors. The indoor air space of the garage and the basement of the on-Site residence were screened for VOCs with the PID. No readings above background were encountered in the structures. The Site has a shallow well, located approximately 250' northwest of the former UST location. A drinking water sample was obtained, and the results will be forthcoming. Five monitoring wells were installed on the Site pursuant to the approved SSQAPP for the Brownfields Phase II ESA. The results of the monitoring well sampling are also forthcoming. According to the ANR Atlas, there are approximately 28 drilled wells within ¼ mile. The nearest bodies of water are an unnamed stream approximately 200' northwest, and the Browns River approximately 450' northeast of the former UST.

Further recommendations for additional testing and/or remediation due to the failed UST will be provided in the Brownfields Phase II ESA report. Please feel free to call with any questions.

Sincerely,

Angela Emerson, PG, EP
Senior Geologist

Photo #1

Piping at top of UST

Photo #2

UST upon removal

Photo #3

UST upon removal

Photo #4

Holes in bottom of UST

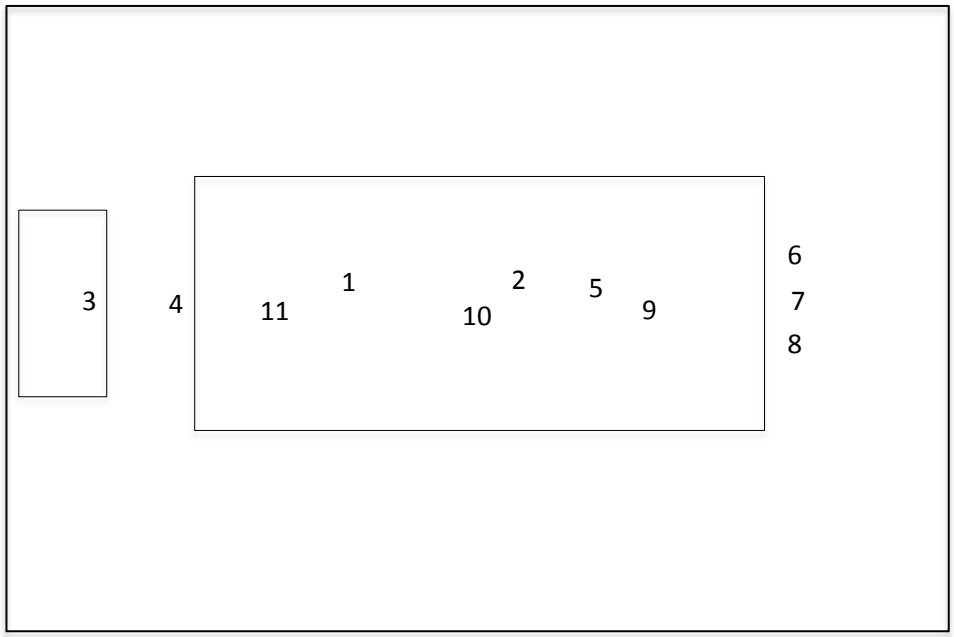
Photo #5

Bottom of UST

Photo #6

Miscellaneous piping removed from excavation

Garage



Route 128

Soil Sampling Sketch
Pigeon Property
1705 Route 128
Westford, Vermont

LE·Environmental

LEE# 19-138
Date: June 25, 2020

Vermont Underground Storage Tank and Piping Closure Form

Agency of Natural Resources, Department of Environmental Conservation Waste Management and Prevention Division

http://dec.vermont.gov/waste-management

Important: All closures must be scheduled with the Underground Storage Tank Program at least 5 business days prior to the commencement of closure. Please call 802-828-1138. Any release must be reported immediately by calling 802-828-1138 (if after hours please call 800-641-5005)

Facility ID #: 5557263 **SMS #** (if applicable)**:** 20194863 **Spill #** (if applicable)**:** WMD211

Name of WMPD staff that the release/spill was reported to: Tim Cropley/Kimberly Caldwell Date: June 2, 2020

To find if a facility has an ID # and/or SMS# or Spill # please use ERT: https://anrweb.vt.gov/DEC/ERT/WasteManagement.aspx

If there is no Facility ID, then please contact the UST Program at 802-828-1138 so one can be assigned.

Section A. Facility/Ownership Information

FACILITY NAME: Pigeon Property # of employee's 0

Street(E911) Address: 1705 Route 128 City/Town: Westford

Type of Facility:

X Commercial/industrial; ____ Retail sales; X Residential; ____ Institutional; ____ Farm (includes fish hatcheries, tree nurseries); ____ Federal; ____ Bulk; ____ State

Owner of UST(s) to be closed: Pigeon Family Living Trust Owner Telephone: _____

Owner mailing address: 1705 Route 128

Owner Email: gepigeon@msn.com

Contact (if different from owner): George Pigeon Contact Telephone: _____

Contact Email: gepigeon@msn.com

Landowner (if different than tank owner): N/A

Section B. Closure Information

What components will be closed/removed? UST system: X; Tanks only: _____; Piping only: _____.

Reason for closure/removal? Liability: ____; Replacement: _____; Abandoned: X; Suspected leak: _____.

UST #	Product	Size (gal)	Tank Age	Tank condition (excellent, good, fair, poor)	Piping Age	Piping condition (excellent, good, fair, poor)	Proximity (ft.) of tanks to bldgs / structures
1	Gasoline	1,100	~80 yrs	Poor	~80 years	Poor	8'

Have any tanks been closed in-place? UST # N/A Authorized by: _____ Date: _____

Type of material used to close tank in place *(Water is not allowed)*: _____

Disposal/destruction of removed UST(s) Location: All Metals Recycling Method: Recycling Date: 6/3/20

Amount (gal) and type of waste generated from USTs: 330 gal gas/water mix, 55-gal drum of sludge

Tank cleaning company: US Ecology/NRC of Williston, VT (must be trained in confine space entry)

Certified hazardous waste hauler: US Ecology/NRC of Williston, VT

Generator ID #: N/A

Tank contents are hazardous wastes and must be handled as such unless recovered as usable product; sludge and solids are not usable/recyclable products and must be handled as hazardous waste. Please contact the Hazardous Waste program with any questions 802-828-1138.

Facility ID # 5557263

Section C. Initial Site Characterization *(Work in this section must be completed by a professional environmental consultant or hydrogeologist with experience in environmental sampling for the presence of hazardous materials. A UST closure assessment report from the consultant must accompany this form.*
Please refer to Sites managements Section I-Rule effective 7/27/2017 for soils management:
http://dec.vermont.gov/sites/dec/files/wmp/Sites/07.11.2017.Adopted.Rule_.for_.SOS_.filing.pdf

Excavation Information. Some removals require more than one excavation. Identify as A, B, C, etc.

Tank #, excavation A,B,C	Depth (ft.)	Excavation size (sq. ft.)	Peak PID reading	Depth of Peak (ft.)	Avg. PID reading	Bedrock depth (ft.)	Groundwater? (Y/N) and depth	Soil type
A	6	190	2,374	1.5	1,004	N/A	Y 6ft bg	Sand and gravel overlying clay

Locate all readings and samples on a site diagram and submit with this form and site assessment

Dig Safe # 20202113528 PID Make: MiniRae Model: Lite Calibration (date/time/gas) 6/2/20 0800 Iso

Have any soils been polyencapsulated on site? X NO; ____YES # cubic yds.: ____ (locate soil pile on site diagram)
site must meet criterial set forth in IRule 35-510(b) http://dec.vermont.gov/sites/dec/files/wmp/Sites/07.11.2017.Adopted.Rule_.for_.SOS_.filing.pdf

Polyencapsulated soils PID range > zero: _____ppm to_____ppm

Have any soils been transported off site? X NO; ____YES. If Yes, # cubic yds: _____ For ____disposal, ____treatment

Location transported to: _____ Approved by: _____
must meet criterial set forth in IRule 35-510(d) http://dec.vermont.gov/sites/dec/files/wmp/Sites/07.11.2017.Adopted.Rule_.for_.SOS_.filing.pdf

Number of soil samples collected for laboratory analysis: 2, Results due date: 6/22/20

Amount of soil backfilled (cubic yds.): 42 PID range > zero: 17.1 ppm to 2,374 ppm

Have limits of soil contamination been defined? X NO; ____YES. Other on-site contamination? Unk NO; ____YES

Is contamination in contact with building foundation? UNk No; ____Yes, If Yes, PID reading; _____ppm

Foundation construction Type: X slab-on-grade; _____Mobile home; ____dirt floor basement;
_____ concrete floor basement; _____other, describe(if needed):_____

Was the indoor air of the onsite building screened with a PID? ____NO; X YES, if YES PID reading: 0.2 ppm

Free Phase product encountered? X NO; ____YES. Thickness: _____ Sheen present: ____NO; X YES

Groundwater encountered? ____NO; X YES Depth: 6 ft Sample collected? X NO; ____YES

Are there existing monitoring wells on-site? X NO; ____YES. How many? _____ (Locate on site diagram)

Have new monitoring wells been installed? ____NO; X YES (Locate on site diagram). Headspace PID readings: ____

Groundwater samples obtained from monitoring wells for lab analysis? ____NO; X YES. Results due date: 7/7/20

Is there a water supply well on site? _____ NO; X YES. Type: X Shallow; ____Rock; ____Spring

Was a sample collected from the supply well for lab analysis? ____NO; X Yes. Results due date: 7/7/20

Receptors impacted: X Soil; ____Indoor Air; ____ Ambient Air; X Groundwater; ____Surface Water; ____Water Supply

Facility ID 5557263

Section D: Tanks and Piping Remaining or to be Installed.

Regardless of size or use, **list all USTs and ASTs currently at facility or to be installed at facility.** For "Tank Status," indicate "abandoned," "in use," or "to be installed*." This includes any UST/ASTs used to store fuel for heat at a public building or a residence.

Note: Some installations may require permits and prior notice to the UST Program. Please call the UST Program with any questions 802-828-1138.

Tank #	UST or AST?	Product	Size (gallons)	Tank Use (heat, backup generator, etc)	Tank age	Tank Status	Piping age	Piping Status
None								

Section E. Statements of UST closure compliance

I, Angela Emerson, as the environmental consultant on-site, I hereby
(Please print name)
certify that the site assessment requirements were performed in accordance with DEC policy and regulations, and that information which I have provided on this form is true and correct to the best of my knowledge.

Signature: _____

Company: LE Envrionmental LLC Telephone#: 802-917-2001

Date of Assessment: June 2, 2020 Date of Closure: June 2, 2020

Return this form along with complete narrative report and photographs to the Department of Environmental Conservation (DEC), Underground Storage Tank Program within 3**0 days of closure**. Do not delay submission of the site assessment report.

An electronic version of the report from an environmental consultant covering all aspects of closure and site assessment, complete with photographs and any other relevant data, must accompany this form and be emailed to WMPD or uploaded on the WMPD FTP server. Please DO NOT SUBMIT PAPER COPIES. All procedures must be conducted by qualified personnel, to include training required by 29 CFR 1910.120. Documentation of all methods and materials used must be adequate. All work must be performed in compliance with DEC policy "UST Closure and Site Assessment Requirements" as well as all applicable statutes, rules, and additional policies. The DEC may reject inadequate closure forms and reports.